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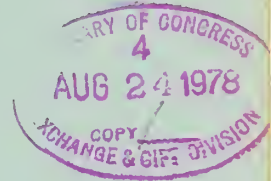




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MESA Informational Report/1978



Injury Experience in Coal Mining, 1972



Injury Experience in Coal Mining, 1972

By Staff, Division of Mining Information Systems, Health and Safety
Analysis Center, Denver, Colo.

UNITED STATES DEPARTMENT OF THE INTERIOR
Cecil D. Andrus, Secretary

Mining Enforcement and Safety Administration
Robert E. Barrett, Administrator

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U58A

1974, 1978

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INJURY EXPERIENCE IN COAL MINING, 1972

by

Staff, Division of Mining Information Systems
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ABSTRACT

This Mining Enforcement and Safety Administration (MESA) report reviews in detail accident, injury, and illness experience in the anthracite and bituminous coal industries of the United States for 1972. Forty-eight tables summarize the reported work injuries by work location, principal cause of injury, degree of injury, part of body injured, and nature of injury, as well as containing correlative information on employment, worktime, and operating activity. Concise historical information is presented in nine tables.

INTRODUCTION

Under the provisions of Section 111, Public Law 91-173, the Federal Coal Mine Health and Safety Act of 1969, accident, injury, illness, employment, and production data for anthracite and bituminous coal mines and preparation plants in the United States were collected under a mandatory reporting system. In 1972, the report formats and procedures for reporting and data processing were modified. Consequently, some information previously published is not now available, while other information, such as nondisabling injury data not formerly collected, is available.

For 1972, only those data reported by operators are incorporated into the data base. No estimates are made of employment, man-hours, injuries, or tons of coal produced for nonrespondent operations except only as necessary to meet statistical processing requirements by providing minimum employment data for reported unmatched injury data in file. Prior to 1972, employment, nonfatal injury data, and coal production were estimated for nonrespondent operations based on Bureau of Mines production statistics.

SCOPE OF STATISTICS

The statistical data in this report cover the work experience of all coal industry personnel engaged in exploration, development, production, maintenance and repair, and construction work including contractors on mine property, as well as supervisory and technical personnel. Information concerning onsite officeworkers at coal mines and preparation plants appears in the salient statistics table and where specifically mentioned in the title of the table.

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The compiled information is based on reports covering 3,336 mines, 872 preparation plants, and 37 independent shops in operation during all or part of 1972.

The terminology used throughout this report is that generally used by the mineral-extractive industries and by MESA. The recording and measuring of work injury experience follows the American National Standard Method.¹

DEFINITION OF TERMS

Key terms used in this publication series are defined or described as follows:

Disabling work injury.--Any injury suffered by a person which arises out of and in the course of his employment that results in death, permanent total disability, permanent partial disability, or temporary total disability.

Fatality.--Any death resulting from a work injury.

Permanent total disability.--Any disabling work injury other than death that permanently and totally incapacitates an employee from following any gainful occupation, or that results in the loss, or the complete loss of use, of both or any two: hands, arms, legs, feet, or eyes.

Permanent partial disability.--Any disabling work injury other than death or permanent total disability that results in the loss, or the complete loss of use, of any member or part of a member of the body, or any permanent impairment of functions of the body or part thereof, regardless of any preexisting disability of the injured member or impaired body function.

Temporary total disability.--Any disabling work injury that does not result in death or permanent impairment, but which renders the injured person unable to perform a regularly established job that is open and available to him, during the entire time interval corresponding to the hours of his regular shift on any one or more days (including Sundays, days off, or plant shutdown) subsequent to the date of injury.

Injury-frequency rates.--The number of work injuries per million man-hours of exposure or per million short tons of coal, calculated by multiplying the total number of work injuries by one million and dividing the product by the total man-hours of worktime or the total short tons of coal, respectively.

Days lost.--The number of full calendar days the injured employee was unable to work as the result of a temporary total disability.

Days charged.--All fatalities and permanent total disabilities have a standard time-loss of 6,000 days. Injuries resulting in permanent partial

¹American National Standards Institute, Inc., American National Standard Method of Recording and Measuring Work Injury Experience, ANSI Z16.1-1967 (R1973).

disability are assigned a time-loss charge depending upon the particular injury as specified in ANSI Z16.1-1967 (R1973).

Disabling injury-severity rates.--The number of days lost or charged from disabling work injuries per million man-hours of exposure or per million short tons of coal. Rates are calculated by multiplying the total number of days lost or charged by one million and dividing the product by the total man-hours of worktime or total short tons of coal.

Average severity.--The average number of days lost or charged per disabling injury. It is calculated from the total number of days lost or charged divided by the total number of disabling injuries.

Nondisabling work injury.--An injury suffered by a person that arises out of and in the course of his employment and requires medical treatment in excess of first aid but does not result in a permanent disability or cause the person to stay away from work for one or more days.

Average men working daily.--Average number of persons at work during the time period(s) that mines or plants were active for production or development. It is computed for each mine or plant by summing the reported number of persons working during each period of active operation and then dividing by the number of periods for which activity was reported. The figure is not the average number of employees working a full year in the coal mining industry.

Principal cause classification.--The cause classification used in this report has been developed through many years of analyzing descriptions of accidents resulting in injuries at mineral extracting and processing operations. It is designed to meet the need for a coding structure to classify injuries into standard accident categories to be used in comparisons and determination of trends.

The following descriptions of the principal causes provide definitions, particularly in the inclusions or exclusions of accidents, for which the principal cause may be subject to misinterpretation.

Falls of roof.--Falls of rock, coal, or slate from their in-place location in the mine roof. Excludes falls of roof caused by equipment knocking out support and falls from pressure bumps or bursts.

Falls of face, rib, or overburden.--Falls of face, side, rib, or pillar from their in-place location in underground workings and falls of high-walls in strip pits and auger mines. Excludes falls from equipment knocking out support and falls from pressure bumps or bursts.

Pressure bumps or bursts.--Falling or flying roof, face, or rib material caused by pressure bumps or bursts.

Inrush of water or material.--Includes inrushes of water or unconsolidated material caused by mining into or too close to flooded old workings, or unconsolidated sediments such as sand.

Sliding or falling material or objects.--Rolling, shifting, sliding, or falling materials or objects not being handled or disturbed by the injured worker. Includes coal or rock already broken from its in-place position.

Slips or falls of persons.--Slips or falls on the same level and from an elevation are grouped separately. Slips or falls in or from haulage equipment that resulted from an accident on haulage, from the motion of haulage equipment, or while getting on or off haulage equipment are excluded. Slips or falls into moving or operating machinery or into electrical equipment also are excluded.

Handling materials.--Injuries occurring while installing, moving, lifting, or carrying coal, rock, supplies, or materials; and injuries from flying particles from materials being handled or moved.

Handtools.--Accidents from tools in hands of injured worker or tools in hands of fellow worker, except power-driven tools. Includes flying pieces from tools being used or materials being worked on.

Stepping or kneeling on sharp or loose objects.--Stepping or kneeling on sharp or loose objects, slips or falls from stepping on loose objects, and cases resulting in bursitis or "miner's knee" from working on hands and knees.

Striking or bumping against objects.--Cases of walking or bumping into stationary objects. Excludes cases of striking or bumping in the course of servicing equipment, repairing, handling materials, using handtools, or operating machinery or haulage equipment, etc. Excludes cases of striking or bumping against moving or operating machinery or electrically powered equipment.

Haulage.--Haulage accidents are divided into the following six groups: (1) Mine-gage rail haulage; (2) standard-gage (railroad) haulage; (3) shuttle cars, mobile electric trucks, rubber-tired equipment, and other nonrail equipment; (4) water transportation; (5) automobile, gasoline or diesel trucks, tractors, etc.; and (6) miscellaneous equipment (ropes, animals, cages, belts, etc.). Included in the haulage category are falls of roof, face, or side from haulage equipment knocking out supports; slips or falls of persons in or from haulage equipment that resulted from an accident to the equipment, from the motion of the equipment, or while getting on or off equipment; and flying particles set in motion by haulage equipment or draft therefrom.

Explosions of gas or dust.--Explosions of gas or dust in the mine environment.

Explosives and breaking agents.--Cases in which the cause of injury was the detonation, fumes, flying fragments, or use of the explosive or breaking agent, fuses, caps, or detonators.

Electricity.--Cases resulting from contact with electric current or from arcs or flashes.

Machinery.--Accidents while operating machines are separated from those while moving or tramping a whole machine. Injuries occurring while moving a repair part of a machine are classed under "handling materials." Included in the machinery classification are falls of roof, face, or side from nonhaulage machinery knocking out support, setting up or servicing machinery, and flying particles set in motion by machinery. Excluded from the classification are accidents occurring in the course of repairing machines, unless the accident resulted from in-motion machinery.

Suffocation.--Divided into suffocation from: (1) natural mine gases or oxygen-deficient atmosphere; or (2) foreign gases such as fumes from oil or gasoline motors, gases and smoke drawn underground from a surface fire, or from gas wells. Exclude gases from mine fires, explosions, and explosives use.

Fires and suffocation from fires.--Fire accidents are divided into: (1) mine fires in which coal or timber is burning; and (2) other fires in which equipment or material other than coal or timber is burning.

Occupational pneumoconiosis.--A chronic dust disease of the lungs, such as might be caused by prolonged inhalation of pulverized coal or other minerals.

Miscellaneous causes.--Includes flying particles from draft or wind; gas or burns from carbide; gas, burns, or flying materials or flashes from acetylene and electric welding and cutting; irritations and burns from battery fluid or other acids; burns from controlled wood or coal fires, steam, hot grease, oil, etc.; and all other accidents not elsewhere classified.

HISTORICAL DATA

Injury experience, employment, and worktime data (excluding officeworkers) for the bituminous coal, Pennsylvania anthracite, and total coal mining industries are shown for 1930-72 in tables 49-51. The man-hour data for 1930-44 in these tables have been converted to a portal-to-portal basis, which became the basis of pay in 1945. Hence the injury-frequency and the productivity rates are directly comparable for each year since 1930.²

Historical information (excluding officeworkers) in the coal mining industry is given in tables 52-57. Figures from 1910 through 1972 represent the entire industry, while those prior to 1910 cover only the States that maintained records of fatal injuries.

GENERAL INJURY EXPERIENCE, 1972

During 1972, the disabling injury experience, excluding officeworkers, at 4,245 coal mines, plants, and shops was 156 fatal and 12,329 nonfatal disabling work injuries. These injuries resulted in a combined fatal and

²Methodology given on pages 4-5, Bureau of Mines Bulletin 509: Injury Experience in Coal Mining, 1948.

nonfatal disabling injury-frequency rate of 46.66 per million man-hours of exposure, consisting of a fatality rate of 0.58 and a nonfatal disabling rate of 46.08. The combined disabling injury-severity rate of 5,409 days lost per million man-hours of exposure consisted of a fatal injury-severity rate of 3,498 days lost and a nonfatal disabling injury-severity rate of 1,911. The average severity of all disabling injuries (excluding officeworkers) was 116 days lost or charged per injury.

This is the first year in which data are available concerning nondisabling injuries, except first aid cases. A total of 16,090 nondisabling injuries (excluding officeworkers) were reported during 1972, resulting in a nondisabling injury-frequency rate of 60.14. Therefore, the "all injury" frequency rate in tables 1, 2, and 3 is higher than for previous years, but only because of the inclusion of nondisabling injuries in the overall frequency rate.

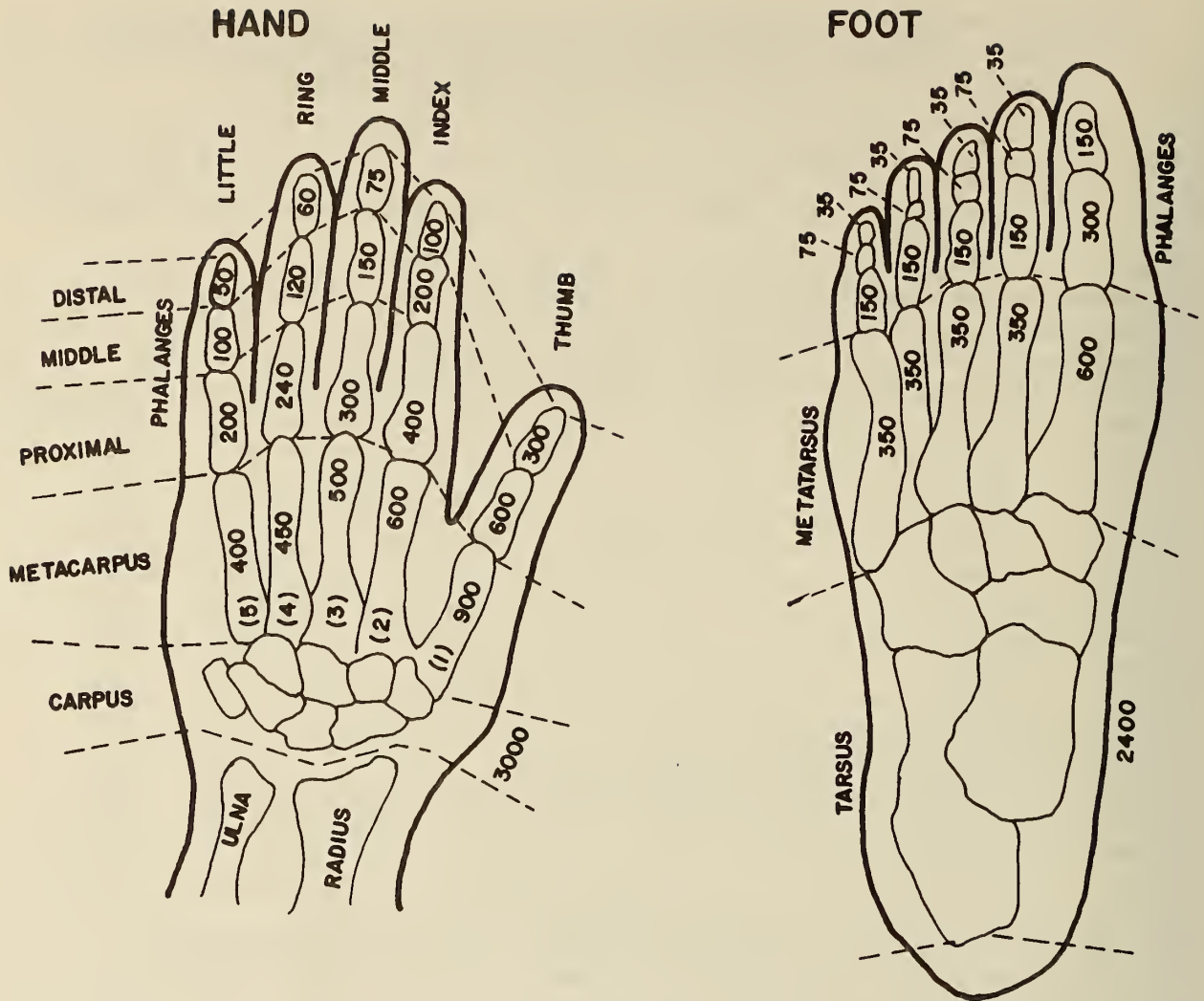
FIGURE A. - Scale of time charges^{1/} for weighting deaths, permanent total disabilities, and permanent partial disabilities for computing severity of injuries

Injury	Time charge (days)
Death.....	6,000
Permanent total disability.....	6,000
Dismemberment ^{2/} or total loss of use:	
Arm above elbow.....	4,500
Arm at or below elbow and above wrist.....	3,600
Hand at wrist.....	3,000
Thumb.....	(3/)
Finger.....	(3/)
Leg above knee.....	4,500
Leg at or below knee and above ankle.....	3,000
Foot at ankle.....	2,400
Great toe.....	(3/)
Other toes.....	(3/)
Loss of sight:	
One eye (whether or not there is sight in the other eye)....	1,800
Both eyes (in one accident).....	6,000
Complete industrial loss of hearing:	
One ear (whether or not there is hearing in the other ear)..	600
Both ears (in one accident).....	3,000
Unrepaired hernia.....	50

^{1/} American National Standards Institute, Inc., American National Standard Method of Recording and Measuring Work Injury Experience, ANSI Z16.1-1967 (R1973).

^{2/} Dismemberment means severance of any part of the bone.

^{3/} See figure B for scheduled charges for hand and foot.



NOTE:

NUMBERS SHOWN ON DIAGRAM ARE CHARGES IN DAYS LOST FOR LOSS OF ALL OR PART OF BONE. FOR ADDITIONAL INFORMATION ON USE OF THE CHART SEE 2.3.1.1 THROUGH 2.3.1.5 ANSI. Z.16.1-1967 (R1973) AMERICAN NATIONAL STANDARD METHOD OF RECORDING AND MEASURING WORK INJURY EXPERIENCE

FIGURE B. - Chart of scheduled charges for loss or loss of use involving hand or foot.

Form 6-348
(February 1972)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Form Approved
O.M.B. No. 42-R 1639



EMPLOYMENT AND PRODUCTION REPORT

Bureau of Mines ID Number _____ Far the month of _____ 19____

Mine Name _____

Company Name _____

Mailing Address _____

1. Classification of Coal Mined: (1) ☐ Anthracite (2) ☐ Bituminous (3) ☐ Subbituminous (4) ☐ Lignite

2. Current Status of Mine: (1) ☐ Active (2) ☐ Temporarily Closed Date: _____

(3) ☐ Permanently Abandoned Date: _____ (4) ☐ Sold (5) ☐ Leased (6) ☐ Subcontracted Date: _____

If any transaction occurred, indicate name and address of the other party: _____

3. Employment, Manhours, and Production

Operations Sub-Unit (1)	Code	Number of persons working during pay period including 12th of the month (2)	Total man-hours worked during the month (3)	Production of clean coal (Short tons) (4)
UNDERGROUND MINE				
Underground	01			
Surface Shops, Yards, etc	02			
SURFACE MINE (including shops and yards)				
Strip	03			
Auger	04			
Culm Bank	05			
Dredge	06			
MECHANICAL CLEANING, PREPARATION PLANT OR BREAKER	30			
OFFICE (workers at mine and/or preparation facility)	00			

4. Other Reportable Data:

Did you have any reportable accidents, injuries, illness, during this report period (1) ☐ Yes (2) ☐ No.

If yes, total number of accidents _____ total number of injuries and illness _____

Person to be contacted regarding this report:

Name _____ Title _____

Date report completed _____ 19____

FIGURE C. - Employment and production report form.

Form No. 6-347
(February 1972)

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES**

**COAL ACCIDENT, INJURY
AND ILLNESS REPORT**

Form Approved
O.M.B. No. 42-R1640

Date of Accident or Illness _____ Time of Accident _____ A.M. ☐ P.M. ☐
Time shift started _____ P.M. ☐ (1) ☐ Production (2) ☐ Maintenance

Bureau of Mines ID Number _____ Company Name _____
Mine Name _____ Mailing Address _____

(1)	(2)	(3)	(4)	(5)	(6)
(7)	(8)	(9)	(10)	(11)	(12)
(13)	(14)	(15)	(16)	(17)	(18)
(19)	(20)	(21)	(22)	(23)	(24)
(25)	(26)	(27)	(28)	(29)	(30)
(31)	(32)	(33)	(34)	(35)	(36)
(37)	(38)	(39)	(40)	(41)	(42)
(43)	(44)	(45)	(46)	(47)	(48)
(49)	(50)	(51)	(52)	(53)	

A. LOCATION OF ACCIDENT OR ILLNESS (Circle the applicable code)		B. TYPE OF ACCIDENT (Circle the applicable code)		C. OCCUPATIONAL ILLNESS (Circle the applicable code)
(a) Underground Mine On Section (1) <input type="checkbox"/> Section ID Number _____ Operator Section Number _____ Off Section (2) <input type="checkbox"/> Operator Location number or name _____ (On Section, circle code for applicable method. Off Section, circle code for principal method used.) 01 Continuous 02 Conventional 03 Hand 04 Longwall (Whether an section or off section, circle location codes describing accident) 01 Shaft 02 Slope 03 Drift 04 Entry 05 Room 06 Face Area 07 Intersection (On section, circle applicable status code. Off section, circle principal status code.) 01 Development 02 Retreat		14 Electricity 15 Machinery 13 Explosive & Breaking Agent 17 Mine Fire 12 Explosion of Gas or Dust 02 Pressure Bump or Burst 03 Fall of Face, Rib, or Side 05 Sliding/Falling Material 01 Fall of Roof 06 Slip or Fall (Person) 08 Handtool 09 Stepping/Kneeling on an object 07 Handling material 11 Haulage 10 Striking or Bumping 20 Ignition of Gas or Dust 16 Suffocation 04 Inundation 18 Other: Specify _____ 19 Lifting/Pulling		21 Occupational skin diseases 22 Dust diseases of the lungs 23 Respiratory diseases (toxic agents) 24 Poisoning (toxic materials) 25 Disorders (physical agents) 26 Disorders (repeated trauma) 29 All other occupational illness
(b) Surface Mine 03 Strip 04 Auger 05 Culm bank 06 Dredge				
(c) Surface Operation 01 Tipple 02 Mechanical Cleaning Plant 03 Preparation Plant or Breaker 04 Tramline or railroad 05 Central Shops 00 Office at mine 06 Other surface operations: Specify _____				

D. ACCIDENT OCCURRENCE DATA: What brought about the accident or illness reported _____

What was unsafe physical or mechanical condition(s) contributing to accident _____

Name equipment, material, or tool involved _____ Model number _____

Describe any unsafe act(s) contributing to accident _____

Personnel injured (1) ☐ Yes (2) ☐ No Number of persons injured _____

COMPLETE DATA BELOW FOR EACH PERSON INJURED OR ILL

1. REGARDING INJURY OR ILLNESS
 What was the agent, object, or tool inflicting injury _____ (1) ☐ Fatal (2) ☐ Nonfatal
 Type of injury or illness _____ Part of Body injured _____
 Amputation (1) ☐ Yes (2) ☐ No. If yes, part of body lost _____

2. REGARDING INJURED OR ILL PERSON
 Full Name of Injured or ill person _____
 Social Security Number _____ Sex _____ Age _____ Total years of mining experience _____ Total years experience in this mine _____
 Regular job title _____ Years of experience as regular job _____ What was employee doing when injured _____
 Was that activity part of regular job (1) ☐ Yes (2) ☐ No. If no, years of experience at that activity _____
 Returned to regular job next regular shift (1) ☐ Yes (2) ☐ No. If yes, at full capacity (1) ☐ Yes (2) ☐ No. Returned to another job next regular shift (1) ☐ Yes (2) ☐ No.
 Was employee transferred to another job or terminated (1) ☐ Yes (2) ☐ No. If yes (1) ☐ after last work days (2) ☐ because of injury or illness, but without last workdays.
 Total number of lost work days _____ Number lost from regular job _____ Date returned to work _____

FIGURE D. - Accident, injury and illness report form.

TABLE 1. - Salient statistics on injuries, injury rates, worktime, production, and productivity
at bituminous coal mines in the United States, 1968-72

	Excluding officeworkers					Including officeworkers				
	1968	1969	1970	1971	1972	1968	1969	1970	1971	1972
Number of injuries:										
Fatal-----	307	190	255	176	153	307	190	255	176	153
Nonfatal disabling-----	9,135	9,425	11,049	11,363	12,012	9,137	9,425	11,049	11,365	12,018
All disabling-----	9,442	9,615	11,304	11,539	12,165	9,444	9,615	11,304	11,541	12,171
Nondisabling-----	NA	NA	NA	NA	15,700	NA	NA	NA	NA	15,731
All injuries-----	9,442	9,615	11,304	11,539	27,865	9,444	9,615	11,304	11,541	27,902
Injury rates:										
Frequency per million man-hours:										
Fatal-----	1.37	0.84	1.02	0.72	0.59	1.35	0.82	1.00	0.70	0.57
Nonfatal disabling-----	40.89	41.44	44.21	46.41	45.96	40.04	40.57	43.31	45.26	44.71
All disabling-----	42.26	42.28	45.23	47.13	46.55	41.38	41.39	44.31	45.96	45.28
Nondisabling-----	NA	NA	NA	NA	60.08	NA	NA	NA	NA	58.52
All injuries-----	42.26	42.28	45.23	47.13	106.62	41.38	41.39	44.31	45.96	103.80
Frequency per million tons:										
Fatal-----	0.57	0.34	0.43	0.32	0.29	0.57	0.34	0.43	0.32	0.29
Nonfatal disabling-----	16.86	16.86	18.42	20.51	22.75	16.86	16.86	18.42	20.51	22.76
All disabling-----	17.43	17.20	18.84	20.83	23.04	17.43	17.20	18.84	20.83	23.05
Nondisabling-----	NA	NA	NA	NA	29.73	NA	NA	NA	NA	29.79
All injuries-----	17.43	17.20	18.84	20.83	52.77	17.43	17.20	18.84	20.83	52.84
Severity per million man-hours:										
Fatal-----	8,245	5,013	6,121	4,313	3,513	8,072	4,907	5,997	4,206	3,415
Nonfatal disabling-----	2,580	2,269	2,339	1,157	1,892	2,526	2,221	2,291	1,128	1,840
All disabling-----	10,825	7,282	8,460	5,470	5,405	10,597	7,129	8,288	5,334	5,255
Severity per million tons:										
Fatal-----	3,399	2,040	2,550	1,906	1,738	3,399	2,040	2,550	1,906	1,738
Nonfatal disabling-----	1,064	923	974	511	936	1,064	923	974	511	937
All disabling-----	4,463	2,963	3,525	2,417	2,675	4,463	2,963	3,525	2,418	2,675
Average severity:										
Permanent partial-----	739	600	756	871	549	739	600	756	871	549
Temporary total-----	38	37	34	12	29	38	37	34	12	29
All disabling-----	256	172	187	116	116	256	172	187	116	116
Average men working daily-----	127,535	127,375	138,542	137,080	157,285	129,975	129,869	141,088	140,350	162,046
Man-hours worked-----	223,405,681	227,411,408	249,945,396	244,819,831	261,338,208	228,206,868	232,316,502	255,118,360	251,083,354	268,802,713
Production--short tons--	541,848,751	558,930,950	599,917,925	553,992,881	528,092,677	541,848,751	558,930,950	599,917,925	553,992,881	528,092,677
Productivity:										
Tons per man-hour-----	2.43	2.46	2.40	2.26	2.02	2.37	2.41	2.35	2.21	1.96
Tons per man-day-----	19.25	19.49	19.09	17.96	NA	18.85	19.08	18.71	17.52	NA

TABLE 2. - Salient statistics on injuries, injury rates, worktime, production, and productivity at Pennsylvania anthracite coal mines in the United States, 1968-72

	Excluding officeworkers					Including officeworkers				
	1968	1969	1970	1971	1972	1968	1969	1970	1971	1972
Number of injuries:										
Fatal-----	4	13	5	5	3	4	13	5	5	3
Nonfatal disabling----	504	492	503	553	317	504	492	503	553	317
All disabling-----	508	505	508	558	320	508	505	508	558	320
Nondisabling-----	NA	NA	NA	NA	390	NA	NA	NA	NA	392
All injuries-----	508	505	508	558	710	508	505	508	558	712
Injury rates:										
Frequency per million man-hours:										
Fatal-----	0.36	1.29	0.49	0.54	0.48	0.35	1.25	0.48	0.52	0.47
Nonfatal disabling----	45.77	48.85	49.20	59.37	51.03	44.53	47.45	48.08	57.66	49.25
All disabling-----	46.13	50.14	49.69	59.90	51.52	44.88	48.70	48.56	58.18	49.71
Nondisabling-----	NA	NA	NA	NA	62.79	NA	NA	NA	NA	60.90
All injuries-----	46.13	50.14	49.69	59.90	114.30	44.88	48.70	48.56	58.18	110.61
Frequency per million tons:										
Fatal-----	0.35	1.27	0.51	0.57	0.46	0.35	1.27	0.51	0.57	0.46
Nonfatal disabling----	43.86	47.99	50.88	63.36	48.82	43.86	47.99	50.88	63.36	48.82
All disabling-----	44.21	49.26	51.39	63.94	49.28	44.21	49.26	51.39	63.94	49.28
Nondisabling-----	NA	NA	NA	NA	60.06	NA	NA	NA	NA	60.37
All injuries-----	44.21	49.26	51.39	63.94	109.34	44.21	49.26	51.39	63.94	109.65
Severity per million man-hours:										
Fatal-----	2,180	7,744	2,934	3,221	2,898	2,120	7,523	2,868	3,128	2,796
Nonfatal disabling----	2,002	1,347	1,663	691	2,709	1,948	1,308	1,626	671	2,614
All disabling-----	4,182	9,090	4,598	3,912	5,606	4,068	8,831	4,493	3,800	5,410
Severity per million tons:										
Fatal-----	2,088	7,609	3,035	3,437	2,772	2,088	7,609	3,035	3,437	2,772
Nonfatal disabling----	1,918	1,323	1,720	738	2,591	1,918	1,323	1,720	738	2,591
All disabling-----	4,007	8,932	4,755	4,175	5,363	4,007	8,932	4,755	4,175	5,363
Average severity:										
Permanent partial----	1,720	581	717	63	238	1,720	581	717	63	238
Temporary total-----	27	23	27	11	33	27	23	27	11	33
All disabling-----	91	181	93	65	109	91	181	93	65	109
Average men working daily-----	6,932	5,927	5,938	5,028	4,922	7,097	6,073	6,079	5,182	5,087
Man-hours worked-----	11,011,239	10,072,530	10,223,810	9,315,193	6,211,617	11,318,383	10,368,604	10,461,595	9,590,353	6,437,045
Production---short tons--	11,491,539	10,251,165	9,885,331	8,727,342	6,493,396	11,491,539	10,251,165	9,885,331	8,727,342	6,493,396
Productivity:										
Tons per man-hour-----	1.04	1.02	0.97	0.94	1.05	1.02	0.99	0.94	0.91	1.01
Tons per man-day-----	7.62	7.45	7.10	6.93	NA	7.43	7.25	6.95	6.74	NA

TABLE 3. - Salient statistics on injuries, injury rates, worktime, production, and productivity
at all coal mines in the United States, 1968-72

	Excluding officeworkers					Including officeworkers				
	1968	1969	1970	1971	1972	1968	1969	1970	1971	1972
Number of injuries:										
Fatal-----	311	203	260	181	156	311	203	260	181	156
Nonfatal disabling-----	9,639	9,917	11,552	11,916	12,329	9,641	9,917	11,552	11,918	12,335
All disabling-----	9,950	10,120	11,812	12,097	12,485	9,952	10,120	11,812	12,099	12,491
Nondisabling-----	NA	NA	NA	NA	16,090	NA	NA	NA	NA	16,123
All injuries-----	9,950	10,120	11,812	12,097	28,575	9,952	10,120	11,812	12,099	28,614
Injury rates:										
Frequency per million man-hours:										
Fatal-----	1.33	0.85	1.00	0.71	0.58	1.30	0.84	0.98	0.69	0.57
Nonfatal disabling-----	41.12	41.76	44.40	46.89	46.08	40.25	40.86	43.50	45.72	44.82
All disabling-----	42.45	42.61	45.40	47.60	46.66	41.55	41.70	44.48	46.41	45.38
Nondisabling-----	NA	NA	NA	NA	60.14	NA	NA	NA	NA	58.58
All injuries-----	42.45	42.61	45.40	47.60	106.80	41.55	41.70	44.48	46.41	103.96
Frequency per million tons:										
Fatal-----	0.56	0.36	0.43	0.32	0.29	0.56	0.36	0.43	0.32	0.29
Nonfatal disabling-----	17.42	17.42	18.94	21.18	23.06	17.42	17.42	18.94	21.18	23.07
All disabling-----	17.98	17.78	19.37	21.50	23.35	17.99	17.78	19.37	21.50	23.37
Nondisabling-----	NA	NA	NA	NA	30.10	NA	NA	NA	NA	30.16
All injuries-----	17.98	17.78	19.37	21.50	53.45	17.99	17.78	19.37	21.50	53.53
Severity per million man-hours:										
Fatal-----	7,960	5,129	5,996	4,273	3,498	7,790	5,019	5,874	4,166	3,401
Nonfatal disabling-----	2,553	2,230	2,312	1,140	1,911	2,499	2,182	2,265	1,112	1,858
All disabling-----	10,513	7,359	8,308	5,413	5,409	10,289	7,201	8,139	5,278	5,259
Severity per million tons:										
Fatal-----	3,372	2,140	2,558	1,930	1,751	3,372	2,140	2,558	1,930	1,751
Nonfatal disabling-----	1,081	931	986	515	956	1,082	931	986	515	957
All disabling-----	4,454	3,070	3,545	2,445	2,707	4,454	3,070	3,545	2,445	2,708
Average severity:										
Permanent partial-----	763	600	756	862	546	763	600	756	862	546
Temporary total-----	37	36	33	12	29	37	36	33	12	29
All disabling-----	248	173	183	114	116	248	173	183	114	116
Average men working										
daily-----	134,467	133,302	144,480	142,108	162,207	137,072	135,942	147,167	145,532	167,133
Man-hours worked-----	234,416,920	237,483,938	260,169,206	254,135,024	267,549,825	239,525,251	242,685,106	265,579,955	260,673,707	275,239,758
Production--short tons--	553,340,290	569,182,115	609,803,256	562,720,223	534,586,073	553,340,290	569,182,115	609,803,256	562,720,223	534,586,073
Productivity:										
Tons per man-hour-----	2.36	2.40	2.34	2.21	2.00	2.31	2.35	2.30	2.16	1.94
Tons per man-day-----	18.66	18.94	18.58	17.53	NA	18.27	18.54	18.21	17.10	NA

TABLE 4. - Worktime, production, and productivity (short tons per man-hour) data at coal mines in the United States, by kind of coal and general work location, 1972

	Average men working daily	Man-hours worked	Production, short tons	Tons per man-hour	Number of operations
Bituminous coal mines:					
Underground mines:					
Underground-----	97,475	169,723,048	287,062,033	1.69	1,534
Surface-----	11,059	16,839,961	-	-	-
Total or average-----	108,534	186,563,009	287,062,033	1.54	1,534
Strip mines-----	30,809	49,892,914	232,158,413	4.65	1,269
Auger mines-----	2,373	1,945,157	8,872,231	4.56	317
Other surface mining-----	17	7,764	-	-	1
Total surface mining-----	33,199	51,845,835	241,030,644	4.65	1,587
Total or average, mining---	141,733	238,408,844	528,092,677	2.22	3,121
Independent shops and yards----	1,850	3,325,592	-	-	35
Mechanical cleaning plants-----	13,702	19,603,772	-	-	785
Grand total or average-----	157,285	261,338,208	528,092,677	2.02	3,941
Pennsylvania anthracite mines:					
Underground mines:					
Underground-----	662	772,412	652,204	.84	72
Surface-----	200	216,940	-	-	-
Total or average-----	862	989,352	652,204	.66	72
Strip mines-----	2,182	2,640,181	3,672,449	1.39	98
Culm banks-----	297	301,932	1,814,515	6.01	43
Dredges-----	18	45,774	354,228	7.74	2
Total surface mining-----	2,497	2,987,887	5,841,192	1.95	143
Total or average, mining---	3,359	3,977,239	6,493,396	1.63	215
Independent shops and yards----	40	77,926	-	-	2
Mechanical cleaning plants-----	1,523	2,156,452	-	-	87
Grand total or average-----	4,922	6,211,617	6,493,396	1.05	304
All coal mines:					
Underground mines:					
Underground-----	98,137	170,495,460	287,714,237	1.69	1,606
Surface-----	11,259	17,056,901	-	-	-
Total or average-----	109,396	187,552,361	287,714,237	1.53	1,606
Strip mines-----	32,991	52,533,095	235,830,862	4.49	1,367
Auger mines-----	2,373	1,945,157	8,872,231	4.56	317
Culm banks-----	314	309,696	1,814,515	5.86	44
Dredges-----	18	45,774	354,228	7.74	2
Total surface mining-----	35,696	54,833,722	246,871,836	4.50	1,730
Total or average, mining---	145,092	242,386,083	534,586,073	2.21	3,336
Independent shops and yards----	1,890	3,403,518	-	-	37
Mechanical cleaning plants-----	15,225	21,760,224	-	-	872
Grand total or average-----	162,207	267,549,825	534,586,073	2.00	4,245

TABLE 5. - Injury experience at bituminous coal mines in the United States, by general work location, 1972

	Underground mines			Strip mines	Auger mines	Other surface mining	Total surface mining	Total mining	Independent shops and yards	Mechanical cleaning plants	Grand total
	Underground	Surface	Total								
Number of injuries:											
Fatal-----	121	6	127	18	1	-	19	146	-	7	153
Nonfatal disabling:											
Permanent total-----	6	1	7	-	-	-	-	7	-	-	7
Permanent partial-----	153	11	164	27	2	-	29	193	1	7	201
Temporary total-----	9,592	535	10,127	1,151	47	-	1,198	11,325	42	437	11,804
All nonfatal disabling----	9,751	547	10,298	1,178	49	-	1,227	11,525	43	444	12,012
All disabling injuries----	9,872	553	10,425	1,196	50	-	1,246	11,671	43	451	12,165
Nondisabling injuries-----	11,436	1,058	12,494	2,133	40	-	2,173	14,667	139	894	15,700
All injuries-----	21,308	1,611	22,919	3,329	90	-	3,419	26,338	182	1,345	27,865
Days lost:											
Fatal-----	726,000	36,000	762,000	108,000	6,000	-	114,000	876,000	-	42,000	918,000
Nonfatal disabling:											
Permanent total-----	36,000	6,000	42,000	-	-	-	-	42,000	-	-	42,000
Permanent partial-----	91,660	8,867	100,527	7,788	375	-	8,163	108,690	640	1,065	110,395
Temporary total-----	283,708	15,186	298,894	28,308	1,077	-	29,385	328,279	1,252	12,493	342,024
All nonfatal disabling----	411,368	30,053	441,421	36,096	1,452	-	37,548	478,969	1,892	13,558	494,419
All disabling-----	1,137,368	66,053	1,203,421	144,096	7,452	-	151,548	1,354,969	1,892	55,558	1,412,419
Frequency rates:											
Per million man-hours:											
Fatal-----	0.71	0.36	0.68	0.36	0.51	-	0.37	0.61	-	0.36	0.59
Nonfatal disabling-----	57.45	32.48	55.20	23.61	25.19	-	23.67	48.34	12.93	22.65	45.96
All disabling injuries----	58.17	32.84	55.88	23.97	25.70	-	24.03	48.95	12.93	23.01	46.55
Nondisabling injuries-----	67.38	62.83	66.97	42.75	20.56	-	41.91	61.52	41.80	45.60	60.08
All injuries-----	125.55	95.67	122.85	66.72	46.27	-	65.95	110.47	54.73	68.61	106.62
Per million tons:											
Fatal-----	.42	-	.44	.08	.11	-	.08	.28	-	-	.29
Nonfatal disabling-----	33.97	-	35.87	5.07	5.52	-	5.09	21.82	-	-	22.75
All disabling injuries----	34.39	-	36.32	5.15	5.64	-	5.17	22.10	-	-	23.04
Nondisabling injuries-----	39.84	-	43.52	9.19	4.51	-	9.02	27.77	-	-	29.73
All injuries-----	74.23	-	79.84	14.34	10.14	-	14.18	49.87	-	-	52.77
Severity rates:											
Per million man-hours:											
Fatal-----	4,278	2,138	4,084	2,165	3,085	-	2,199	3,674	-	2,142	3,513
Nonfatal disabling-----	2,424	1,785	2,366	723	746	-	724	2,009	569	692	1,892
All disabling injuries----	6,701	3,922	6,450	2,888	3,831	-	2,923	5,683	569	2,834	5,405
Per million tons:											
Fatal-----	2,529	-	2,654	465	676	-	473	1,659	-	-	1,738
Nonfatal disabling-----	1,433	-	1,538	155	164	-	156	907	-	-	936
All disabling injuries----	3,962	-	4,192	621	840	-	629	2,566	-	-	2,675
Average severity:											
Permanent partial-----	599	806	613	288	188	-	281	563	640	152	549
Temporary total-----	30	28	30	25	23	-	25	29	30	29	29
All disabling injuries-----	115	119	115	120	149	-	122	116	44	123	116

TABLE 6. - Injury experience at Pennsylvania anthracite mines, by general work location, 1972

	Underground mines			Strip mines	Culm banks	Dredges	Total surface mining	Total mining	Independent shops and yards	Mechanical cleaning plants	Grand total
	Underground	Surface	Total								
Number of injuries:											
Fatal-----	1	-	1	2	-	-	2	3	-	-	3
Nonfatal disabling:											
Permanent total-----	-	-	-	1	-	-	1	1	-	-	1
Permanent partial-----	-	-	-	1	-	-	1	1	-	1	2
Temporary total-----	72	5	77	125	14	-	139	216	2	96	314
All nonfatal disabling----	72	5	77	127	14	-	141	218	2	97	317
All disabling injuries----	73	5	78	129	14	-	143	221	2	97	320
Nondisabling injuries-----	52	4	56	137	13	2	152	208	18	164	390
All injuries-----	125	9	134	266	27	2	295	429	20	261	710
Days lost:											
Fatal-----	6,000	-	6,000	12,000	-	-	12,000	18,000	-	-	18,000
Nonfatal disabling:											
Permanent total-----	-	-	-	6,000	-	-	6,000	6,000	-	-	6,000
Permanent partial-----	-	-	-	75	-	-	75	75	-	400	475
Temporary total-----	1,701	67	1,768	3,997	223	-	4,220	5,988	7	4,355	10,350
All nonfatal disabling----	1,701	67	1,768	10,072	223	-	10,295	12,063	7	4,755	16,825
All disabling-----	7,701	67	7,768	22,072	223	-	22,295	30,063	7	4,755	34,825
Frequency rates:											
Per million man-hours:											
Fatal-----	1.29	-	1.01	0.76	-	-	0.67	0.75	-	-	0.48
Nonfatal disabling-----	93.21	23.05	77.83	48.10	46.37	-	47.19	54.81	25.67	44.98	51.03
All disabling injuries----	94.51	23.05	78.84	48.86	46.37	-	47.86	55.57	25.67	44.98	51.52
Nondisabling injuries-----	67.32	18.44	56.60	51.89	43.06	43.69	50.87	52.30	230.99	76.05	62.79
All injuries-----	161.83	41.49	135.44	100.75	89.42	43.69	98.73	107.86	256.65	121.03	114.30
Per million tons:											
Fatal-----	1.53	-	1.53	.54	-	-	.34	.46	-	-	.46
Nonfatal disabling-----	110.39	-	118.06	34.58	7.72	-	24.14	33.57	-	-	48.82
All disabling injuries----	111.93	-	119.59	35.13	7.72	-	24.48	34.03	-	-	49.28
Nondisabling injuries-----	79.73	-	85.86	37.30	7.16	5.65	26.02	32.03	-	-	60.06
All injuries-----	191.66	-	205.46	72.43	14.88	5.65	50.50	66.07	-	-	109.34
Severity rates:											
Per million man-hours:											
Fatal-----	7,768	-	6,065	4,545	-	-	4,016	4,526	-	-	2,898
Nonfatal disabling-----	2,202	309	1,787	3,815	739	-	3,446	3,033	90	2,205	2,709
All disabling injuries----	9,970	309	7,852	8,360	739	-	7,462	7,559	90	2,205	5,606
Per million tons:											
Fatal-----	9,200	-	9,200	3,268	-	-	2,054	2,772	-	-	2,772
Nonfatal disabling-----	2,608	-	2,711	2,743	123	-	1,762	1,858	-	-	2,591
All disabling injuries----	11,808	-	11,910	6,010	123	-	3,817	4,630	-	-	5,363
Average severity:											
Permanent partial-----	-	-	-	75	-	-	75	75	-	400	238
Temporary total-----	24	13	23	32	16	-	30	28	4	45	33
All disabling injuries-----	105	13	100	171	16	-	156	136	4	49	109

TABLE 7. - Injury experience at all coal mines in the United States, by general work location, 1972

	Underground mines			Strip mines	Augar mines	Culm banks	Dredges	Total surface mining	Total mining	Independent shops and yards	Mechanical cleaning plants	Grand total
	Underground	Surface	Total									
Number of injuries:												
Fatal-----	122	6	128	20	1	-	-	21	149	-	7	156
Nonfatal disabling:												
Permanent total-----	6	1	7	1	-	-	-	1	8	-	-	8
Permanent partial-----	153	11	164	28	2	-	-	30	194	1	8	203
Temporary total-----	9,664	540	10,204	1,276	47	14	-	1,337	11,541	44	533	12,118
All nonfatal disabling----	9,823	552	10,375	1,305	49	14	-	1,368	11,743	45	541	12,329
All disabling injuries----	9,945	558	10,503	1,325	50	14	-	1,389	11,892	45	548	12,485
Nondisabling injuries-----	11,488	1,062	12,550	2,270	40	13	2	2,325	14,875	157	1,058	16,090
All injuries-----	21,433	1,620	23,053	3,595	90	27	2	3,714	26,767	202	1,606	28,575
Days lost:												
Fatal-----	732,000	36,000	768,000	120,000	6,000	-	-	126,000	894,000	-	42,000	936,000
Nonfatal disabling:												
Permanent total-----	36,000	6,000	42,000	6,000	-	-	-	6,000	48,000	-	-	48,000
Permanent partial-----	91,660	8,867	100,527	7,863	375	-	-	8,238	108,765	640	1,465	110,870
Temporary total-----	285,409	15,253	300,662	32,305	1,077	223	-	33,605	334,267	1,259	16,848	352,374
All nonfatal disabling----	413,069	30,120	443,189	46,168	1,452	223	-	47,843	491,032	1,899	18,313	511,244
All disabling-----	1,145,069	66,120	1,211,189	166,168	7,452	223	-	173,843	1,385,032	1,899	60,313	1,447,244
Frequency rates:												
Per million man-hours:												
Fatal-----	0.72	0.35	0.68	0.38	0.51	-	-	0.38	0.61	-	0.32	0.58
Nonfatal disabling-----	57.61	32.36	55.32	24.84	25.19	45.21	-	24.95	48.45	13.22	24.86	46.08
All disabling injuries----	58.33	32.71	56.00	25.22	25.70	45.21	-	25.33	49.06	13.22	25.18	46.66
Nondisabling injuries-----	67.38	62.26	66.91	43.21	20.56	41.98	43.69	42.40	61.37	46.13	48.62	60.14
All injuries-----	125.71	94.98	122.92	68.43	46.27	87.18	43.69	67.73	110.43	59.35	73.80	106.80
Per million tons:												
Fatal-----	.42	-	.44	.08	.11	-	-	.09	.28	-	-	.29
Nonfatal disabling-----	34.14	-	36.06	5.53	5.52	7.72	-	5.54	21.97	-	-	23.06
All disabling injuries----	34.57	-	36.50	5.62	5.64	7.72	-	5.63	22.25	-	-	23.35
Nondisabling injuries-----	39.93	-	43.62	9.63	4.51	7.16	5.65	9.42	27.83	-	-	30.10
All injuries-----	74.49	-	80.12	15.24	10.14	14.88	5.65	15.04	50.07	-	-	53.45
Severity rates:												
Per million man-hours:												
Fatal-----	4,293	2,111	4,095	2,284	3,085	-	-	2,298	3,688	-	1,930	3,498
Nonfatal disabling-----	2,423	1,766	2,363	879	746	720	-	873	2,026	558	842	1,911
All disabling injuries----	6,716	3,876	6,458	3,163	3,831	720	-	3,170	5,714	558	2,772	5,409
Per million tons:												
Fatal-----	2,544	-	2,669	509	676	-	-	510	1,672	-	-	1,751
Nonfatal disabling-----	1,436	-	1,540	196	164	123	-	194	919	-	-	956
All disabling injuries----	3,980	-	4,210	705	840	123	-	704	2,591	-	-	2,707
Average severity:												
Permanent partial-----	599	806	613	281	188	-	-	275	561	640	183	546
Temporary total-----	30	28	29	25	23	16	-	25	29	29	32	29
All disabling injuries-----	115	118	115	125	149	16	-	125	116	42	110	116

TABLE 8. - Number of injuries and frequency and severity rates at coal mines in the United States, by degree of injury, 1972

Degree of injury	Bituminous coal mines			Pennsylvania anthracite mines			All coal mines		
	Number of injuries	Injury rates		Number of injuries	Injury rates		Number of injuries	Injury rates	
		Frequency	Severity		Frequency	Severity		Frequency	Severity
Fatal-----	153	0.59	3,513	3	0.48	2,898	156	0.58	3,498
Permanent total-----	7	.03	161	1	.16	966	8	.03	179
Permanent partial-----	201	.77	422	2	.32	76	203	.76	414
Temporary total-----	11,804	45.17	1,309	314	50.55	1,666	12,118	45.29	1,317
All nonfatal disabling-----	12,012	45.96	1,892	317	51.03	2,709	12,329	46.08	1,911
All disabling-----	12,165	46.55	5,405	320	51.52	5,606	12,485	46.66	5,409
Nondisabling-----	15,700	60.08		390	62.79		16,090	60.14	
All injuries-----	27,865	106.62		710	114.30		28,575	106.80	

TABLE 9. - Comparative injury data at bituminous coal operations (mines and mechanical cleaning plants) with and without fatalities in the United States, 1972

	Operations reporting fatal injuries	Operations reporting no fatal injuries	All bituminous coal operations
Number of operations 1/ -----	128	3,813	3,941
Production-----short tons-----	87,312,870	440,779,807	528,092,677
Proportion of total tonnage-----percent-----	16.5	83.5	100.0
Number of employees-----	23,250	134,035	157,285
Proportion of total employees-----percent-----	14.8	85.2	100.0
Number of employees per operation-----	182	35	40
Man-hours worked-----	45,091,197	216,247,011	261,338,208
Average hours worked per man-----	1,939	1,613	1,662
Production per man-hour-----	1.94	2.04	2.02
Number of fatalities-----	153	-	153
Number of nonfatal disabling injuries-----	1,925	10,087	12,012
Number of nondisabling injuries-----	3,222	12,478	15,700
Fatality rate per million man-hours-----	3.39	-	0.59
Nonfatal disabling injury rate per million man-hours-----	42.69	46.65	45.96
Nondisabling injury rate per million man-hours-----	71.46	57.70	60.08

1/ Includes total of 3,156 mines and 785 mechanical cleaning plants.

TABLE 10. - Comparative injury data at Pennsylvania anthracite operations (mines and mechanical cleaning plants) with and without fatalities in the United States, 1972

	Operations reporting fatal injuries	Operations reporting no fatal injuries	All anthracite coal operations
Number of operations 1/ -----	3	301	304
Production-----short tons-----	345,594	6,147,802	6,493,396
Proportion of total tonnage-----percent-----	5.3	94.7	100.0
Number of employees-----	60	4,862	4,922
Proportion of total employees-----percent-----	1.2	98.8	100.0
Number of employees per operation-----	20	16	16
Man-hours worked-----	93,777	6,117,840	6,211,617
Average hours worked per man-----	1,563	1,258	1,262
Production per man-hour-----	3.69	1.00	1.05
Number of fatalities-----	3	-	3
Number of nonfatal disabling injuries-----	11	306	317
Number of nondisabling injuries-----	3	387	390
Fatality rate per million man-hours-----	31.99	-	0.48
Nonfatal disabling injury rate per million man-hours-----	117.30	50.02	51.03
Nondisabling injury rate per million man-hours-----	31.99	63.26	62.79

1/ Includes total of 217 mines and 87 mechanical cleaning plants.

TABLE 11. - Number of injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1972

Principal cause of injury	Bituminous coal mines					Pennsylvania anthracite mines					All coal mines				
	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries
Underground mines:															
Underground:															
Falls of roof or back	43	1,173	1,216	1,170	2,386	-	3	3	1	4	43	1,176	1,219	1,171	2,390
Falls of face or rib	6	372	378	335	713	1	7	8	-	8	7	379	386	335	721
Pressure bumps or bursts	-	8	8	8	16	-	-	-	-	-	-	8	8	8	16
Inrush of water	1	-	1	-	1	-	-	-	-	-	1	-	1	-	1
Sliding or falling material or objects	1	251	252	416	668	-	5	5	5	10	-	256	257	421	678
Slips or falls of persons	-	638	638	738	1,376	-	13	13	17	30	-	651	651	755	1,406
Handling material	-	2,516	2,516	2,866	5,382	-	20	20	13	33	-	2,536	2,536	2,879	5,415
Handtools	-	558	558	1,317	1,875	-	5	5	5	10	-	563	563	1,322	1,885
Stepping or kneeling on sharp or loose objects	-	225	225	345	570	-	1	1	1	2	-	226	226	346	572
Striking or bumping against objects	-	128	128	214	342	-	1	1	1	2	-	129	129	218	347
Haulage	37	1,556	1,593	1,493	3,086	-	6	6	2	8	37	1,562	1,599	1,495	3,094
Explosions of gas or dust	5	14	19	12	31	-	-	-	-	-	5	14	19	12	31
Explosives	2	32	34	42	76	-	-	-	-	-	2	32	34	42	76
Electricity	12	309	321	451	782	-	7	7	3	10	12	339	341	451	792
Machinery	16	1,608	1,624	1,611	3,238	-	7	7	3	10	16	1,611	1,625	1,613	3,238
Suffocation (no flame or smoldering)	1	2	3	2	5	-	-	-	-	-	1	2	2	2	5
Fires or suffocation from fires	9	11	20	25	45	-	4	4	1	5	9	11	20	25	45
Miscellaneous causes	-	304	304	392	696	-	-	-	-	-	-	308	308	393	701
Total	121	9,751	9,872	11,436	21,308	1	72	73	52	125	122	9,823	9,945	11,488	21,433
Surface:															
Sliding or falling material or objects	1	15	16	34	50	-	-	-	-	-	1	15	16	34	50
Slips or falls of persons	-	102	102	110	212	-	-	-	-	-	-	102	102	110	212
Handling material	1	170	171	342	513	-	4	4	1	5	1	174	175	343	518
Handtools	-	25	25	169	194	-	-	-	1	1	-	25	25	170	195
Stepping or kneeling on sharp or loose objects	-	12	12	22	34	-	-	-	-	-	-	12	12	22	34
Striking or bumping against objects	-	7	7	20	27	-	-	-	-	-	-	11	11	20	27
Suffocation	2	110	112	112	224	-	-	-	-	-	2	117	112	112	224
Electricity	1	19	20	24	43	-	-	-	1	1	1	19	20	24	44
Machinery	1	42	43	74	117	-	1	1	1	1	1	43	44	74	118
Suffocation (no flame or smoldering)	-	1	1	6	7	-	-	-	-	-	-	1	1	1	7
Fires or suffocation from fires	-	1	1	6	7	-	-	-	-	-	-	1	1	6	7
Miscellaneous causes	-	43	43	146	189	-	-	-	1	1	-	43	43	147	190
Total	6	547	553	1,058	1,611	-	5	5	4	9	6	552	558	1,062	1,620
Total, underground mines	127	10,298	10,425	12,494	22,919	1	77	78	56	134	128	10,375	10,503	12,550	23,053

TABLE 11. - Number of injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1972 - Continued

Principal cause of injury	Bituminous coal mines					Pennsylvania anthracite mines					All coal mines				
	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries
Strip mines:															
Falls of face or side	1	19	20	23	43	-	1	1	-	1	1	20	21	23	44
Sliding or falling material or objects	-	25	25	53	78	-	6	6	7	13	-	31	31	60	91
Slips or falls of persons	-	276	276	313	589	-	23	23	20	43	-	299	299	333	632
Handling material	1	244	245	515	760	-	37	37	36	73	1	281	282	551	833
Handtools	-	104	104	322	426	-	11	11	29	40	-	115	115	351	466
Stepping or kneeling on sharp or loose objects	-	28	28	30	58	-	4	4	1	5	-	32	32	31	63
Striking or bumping against objects	-	4	4	30	34	-	-	-	1	1	-	4	4	31	35
Explosives	6	12	128	158	286	1	20	21	5	26	7	142	149	163	312
Explosives of gas or dust	1	8	9	7	14	-	-	-	-	-	-	8	8	1	17
Electricity	2	19	21	35	56	-	-	-	1	1	2	19	21	36	57
Machinery	7	196	203	275	478	-	10	10	13	23	7	206	213	288	501
Suffocation (no flame or smoldering)	-	-	-	2	2	-	-	-	-	-	-	-	-	2	2
Fires or suffocation from fires	-	2	2	4	6	1	-	1	-	1	1	2	3	4	7
Miscellaneous causes	-	125	125	365	490	-	15	15	24	39	-	140	140	389	529
Total	18	1,178	1,196	2,133	3,329	2	127	129	137	266	20	1,305	1,325	2,270	3,595
Other surface mining: 1/															
Falls of face or side	-	2	2	1	3	-	-	-	-	-	-	2	2	1	3
Sliding or falling material or objects	-	1	1	1	2	-	3	3	1	4	-	4	4	2	6
Slips or falls of persons	-	5	5	6	11	-	4	4	4	8	-	9	9	10	19
Handling material	1	11	12	10	22	-	2	2	2	4	1	13	14	12	26
Handtools	-	4	4	8	12	-	3	3	2	5	-	7	7	10	17
Stepping or kneeling on sharp or loose objects	-	1	1	-	1	-	-	-	-	-	-	1	1	-	1
Striking or bumping against objects	-	1	1	-	1	-	1	1	-	1	-	1	1	1	1
Haulage	-	5	5	2	7	-	1	1	-	1	-	6	6	2	8
Electricity	-	1	1	-	1	-	-	-	1	1	-	1	1	1	2
Machinery	-	14	14	9	23	-	-	-	2	2	-	14	14	11	25
Miscellaneous causes	-	4	4	3	7	-	1	1	3	4	-	5	5	6	11
Total	1	49	50	40	90	-	14	14	15	29	1	63	64	55	119
Total, surface	19	1,227	1,246	2,173	3,419	2	141	143	152	295	21	1,368	1,389	2,325	3,714
Total, mining	146	11,525	11,671	16,667	26,338	3	218	221	208	429	149	11,743	11,892	14,875	26,767

See footnote at end of table.

TABLE 11. - Number of injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1972 - Continued

Principal cause of injury	Bituminous coal mines					Pennsylvania anthracite mines					All coal mines				
	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries
Independent shops and yards:															
Sliding or falling material or objects ---	-	2	2	4	6	-	1	1	1	2	-	3	3	5	8
Slips or falls of persons -----	-	10	10	12	22	-	-	-	1	1	-	10	10	13	23
Handling material -----	-	14	14	40	54	-	-	14	5	5	-	14	14	45	59
Handtools -----	-	4	4	27	31	-	-	-	3	3	-	4	4	30	34
Stepping or kneeling on sharp or loose objects -----	-	-	-	1	1	-	-	-	-	-	-	-	-	1	1
Haulage -----	-	1	1	13	14	-	-	-	-	-	-	1	1	13	14
Electricity -----	-	1	1	1	2	-	-	-	1	1	-	1	1	2	3
Machinery -----	-	6	6	13	19	-	-	-	3	3	-	6	6	16	22
Miscellaneous causes -----	-	5	5	28	33	-	1	1	4	5	-	6	6	32	38
Total -----	-	43	43	139	182	-	2	2	18	20	-	45	45	157	202
Mechanical cleaning plants:															
Sliding or falling material or objects ---	-	12	12	20	32	-	4	4	9	13	-	16	16	29	45
Slips or falls of persons -----	-	93	93	138	231	-	18	18	25	43	-	111	111	163	274
Handling material -----	-	120	120	293	413	-	33	33	56	89	-	153	153	349	502
Handtools -----	-	34	34	128	162	-	9	9	16	25	-	43	43	144	187
Stepping or kneeling on sharp or loose objects -----	-	10	10	24	34	-	3	3	2	5	-	13	13	26	39
Striking or bumping against objects -----	-	5	5	9	14	-	1	1	7	8	-	6	6	16	22
Haulage -----	3	70	73	85	158	-	16	16	19	35	3	86	89	104	193
Explosions of gas or dust -----	-	1	1	-	1	-	-	-	-	-	-	1	1	-	1
Explosives -----	-	1	1	1	2	-	-	-	-	-	-	-	-	-	-
Electricity -----	1	14	15	13	28	-	-	-	7	11	1	14	15	13	28
Machinery -----	3	41	44	61	105	-	4	4	4	9	3	45	48	68	116
Suffocation (no flame or smoldering) -----	-	1	1	1	1	-	-	-	-	-	-	1	1	1	1
Fires or suffocation from fires -----	-	2	2	2	4	-	-	-	-	-	-	2	2	2	4
Miscellaneous causes -----	-	40	40	120	160	-	9	9	23	32	-	49	49	143	192
Total -----	7	444	451	894	1,345	-	97	97	164	261	7	541	548	1,058	1,606
Grand total -----	153	12,012	12,165	15,700	27,865	3	317	320	390	710	156	12,329	12,485	16,090	28,575

y Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 12. - Days of disability from injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1972

Principal cause of injury	Bituminous coal mines			Pennsylvania anthracite mines			All coal mines		
	Fatal	Nonfatal disabling	Total disabling	Fatal	Nonfatal disabling	Total disabling	Fatal	Nonfatal disabling	Total disabling
Underground mines:									
Underground:									
Falls of roof or back -----	258,000	66,296	324,296	-	120	120	258,000	66,416	324,416
Falls of face or rib -----	36,000	16,751	52,751	6,000	338	6,338	42,000	17,089	59,089
Pressure bumps or bursts -----	-	34	34	-	-	-	-	34	34
Inrush of water -----	6,000	-	6,000	-	-	-	6,000	-	6,000
Sliding or falling material or objects -----	6,000	11,550	17,550	-	62	62	6,000	11,612	17,612
Slips or falls of persons -----	-	20,150	20,150	-	238	238	-	20,388	20,388
Handling material -----	-	66,124	66,124	-	559	559	-	66,683	66,683
Handtools -----	-	10,618	10,618	-	16	16	-	10,634	10,634
Stepping or kneeling on sharp or loose objects -----	-	4,285	4,285	-	2	2	-	4,287	4,287
Striking or bumping against objects -----	-	1,900	1,900	-	5	5	-	1,905	1,905
Haulage -----	222,000	106,406	328,406	-	78	78	222,000	106,484	328,484
Explosions of gas or dust -----	30,000	1,257	31,257	-	-	-	30,000	1,257	31,257
Explosives -----	12,000	3,930	15,930	-	-	-	12,000	3,930	15,930
Electricity -----	12,000	5,075	17,075	-	-	-	12,000	5,075	17,075
Machinery -----	84,000	84,925	168,925	-	111	111	84,000	85,036	169,036
Suffocation (no flame or smoldering) -----	6,000	6	6,006	-	-	-	6,000	6	6,006
Fires or suffocation from fires -----	54,000	161	54,161	-	-	-	54,000	161	54,161
Miscellaneous causes -----	-	11,900	11,900	-	172	172	-	12,072	12,072
Total -----	726,000	411,368	1,137,368	6,000	1,701	7,701	732,000	413,069	1,145,069
Surface:									
Sliding or falling material or objects -----	6,000	334	6,334	-	-	-	6,000	334	6,334
Slips or falls of persons -----	-	8,997	8,997	-	-	-	-	8,997	8,997
Handling material -----	6,000	4,969	10,969	-	28	28	6,000	4,997	10,997
Handtools -----	-	916	916	-	-	-	-	916	916
Stepping or kneeling on sharp or loose objects -----	-	124	124	-	-	-	-	124	124
Striking or bumping against objects -----	-	135	135	-	-	-	-	135	135
Haulage -----	12,000	6,862	18,862	-	-	-	12,000	6,862	18,862
Electricity -----	6,000	413	6,413	-	-	-	6,000	413	6,413
Machinery -----	6,000	6,356	12,356	-	39	39	6,000	6,395	12,395
Suffocation (no flame or smoldering) -----	-	5	5	-	-	-	-	5	5
Fires or suffocation from fires -----	-	26	26	-	-	-	-	26	26
Miscellaneous causes -----	-	916	916	-	-	-	-	916	916
Total -----	36,000	30,053	66,053	-	67	67	36,000	30,120	66,120
Total, underground mines -----	762,000	441,421	1,203,421	6,000	1,768	7,768	768,000	443,189	1,211,189

TABLE 12. - Days of disability from injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1972 - Continued

Principal cause of injury	Bituminous coal mines			Pennsylvania anthracite mines			All coal mines		
	Fatal	Nonfatal disabling	Total disabling	Fatal	Nonfatal disabling	Total disabling	Fatal	Nonfatal disabling	Total disabling
Strip mines:									
Falls of face or side -----	6,000	721	6,721	-	61	61	6,000	782	6,782
Sliding or falling material or objects -----	-	1,377	1,377	-	655	655	-	2,032	2,032
Slips or falls of persons -----	-	7,591	7,591	-	591	591	-	8,182	8,182
Handling material -----	6,000	5,988	11,988	-	995	995	6,000	6,983	12,983
Handtools -----	-	1,933	1,933	-	6,283	6,283	-	8,216	8,216
Stepping or kneeling on sharp or loose objects -----	-	591	591	-	205	205	-	796	796
Striking or bumping against objects -----	-	144	144	-	-	-	-	144	144
Haulage -----	36,000	3,889	39,889	6,000	491	6,491	42,000	4,380	46,380
Explosions of gas or dust -----	-	69	69	-	-	-	-	69	69
Explosives -----	6,000	131	6,131	-	-	-	6,000	131	6,131
Electricity -----	12,000	286	12,286	-	-	-	-	12,000	12,286
Machinery -----	42,000	11,607	53,607	-	627	627	42,000	12,234	54,234
Suffocation (no flame or smoldering) -----	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires -----	-	9	9	6,000	-	6,000	6,000	9	6,009
Miscellaneous causes -----	-	1,760	1,760	-	164	164	-	1,924	1,924
Total -----	108,000	36,096	144,096	12,000	10,072	22,072	120,000	46,168	166,168
Other surface mining: 1/									
Falls of face or side -----	-	248	248	-	-	-	-	248	248
Sliding or falling material or objects -----	-	21	21	-	96	96	-	117	117
Slips or falls of persons -----	-	185	185	-	64	64	-	249	249
Handling material -----	6,000	533	6,533	-	9	9	6,000	542	6,542
Handtools -----	-	104	104	-	18	18	-	122	122
Stepping or kneeling on sharp or loose objects -----	-	71	71	-	-	-	-	71	71
Striking or bumping against objects -----	-	8	8	-	-	-	-	8	8
Haulage -----	-	38	38	-	12	12	-	50	50
Electricity -----	-	1	1	-	-	-	-	1	1
Machinery -----	-	226	226	-	-	-	-	226	226
Miscellaneous causes -----	-	17	17	-	24	24	-	41	41
Total -----	6,000	1,452	7,452	-	223	223	6,000	1,675	7,675
Total, surface -----	114,000	37,548	151,548	12,000	10,295	22,295	126,000	47,843	173,843
Total, mining -----	876,000	478,969	1,354,969	18,000	12,063	30,063	894,000	491,032	1,385,032

See footnote at end of table.

TABLE 12. - Days of disability from injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1972 - Continued

Principal cause of injury	Bituminous coal mines			Pennsylvania anthracite mines			All coal mines		
	Fatal	Nonfatal disabling	Total disabling	Fatal	Nonfatal disabling	Total disabling	Fatal	Nonfatal disabling	Total disabling
Independent shops and yards:									
Sliding or falling material or objects ----	-	21	21	-	4	4	-	25	25
Slips or falls of persons ----	-	120	120	-	-	-	-	120	120
Handling material ----	-	856	856	-	-	-	-	856	856
Handtools ----	-	10	10	-	-	-	-	10	10
Stepping or kneeling on sharp or loose objects ----	-	-	-	-	-	-	-	-	-
Haulage ----	-	3	3	-	-	-	-	3	3
Electricity ----	-	207	207	-	-	-	-	207	207
Machinery ----	-	640	640	-	-	-	-	640	640
Miscellaneous causes ----	-	35	35	-	3	3	-	38	38
Total ----	-	1,892	1,892	-	7	7	-	1,899	1,899
Mechanical cleaning plants:									
Sliding or falling material or objects ----	-	414	414	-	246	246	-	660	660
Slips or falls of persons ----	-	3,878	3,878	-	650	650	-	4,528	4,528
Handling material ----	-	3,496	3,496	-	2,382	2,382	-	5,878	5,878
Handtools ----	-	1,017	1,017	-	65	65	-	1,082	1,082
Stepping or kneeling on sharp or loose objects ----	-	205	205	-	54	54	-	259	259
Striking or bumping against objects ----	-	47	47	-	6	6	-	53	53
Haulage ----	-	2,081	2,081	-	1,056	1,056	-	3,137	3,137
Explosions of gas or dust ----	18,000	80	80	-	-	-	18,000	80	80
Explosives ----	-	129	129	-	-	-	-	129	129
Electricity ----	6,000	705	6,705	-	-	-	6,000	705	6,705
Machinery ----	18,000	1,086	19,086	-	122	122	18,000	1,208	19,208
Suffocation (no flame or smoldering) ----	-	1	1	-	-	-	-	1	1
Fires or suffocation from fires ----	-	5	5	-	-	-	-	5	5
Miscellaneous causes ----	-	414	414	-	174	174	-	588	588
Total ----	42,000	13,558	55,558	-	4,755	4,755	42,000	18,313	60,313
Grand total ----	918,000	494,419	1,412,419	18,000	16,825	34,825	936,000	511,244	1,447,244

1/ Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 13. - Average severity of all disabling injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1972

Principal cause of injury	Bituminous coal mines	Pennsylvania anthracite mines	All coal mines
Underground mines:			
Underground:			
Falls of roof or back-----	267	40	266
Falls of face or rib-----	140	792	153
Pressure bumps or bursts-----	4	-	4
Inrush of water-----	6,000	-	6,000
Sliding or falling material or objects-----	70	12	69
Slips or falls of persons-----	32	18	31
Handling material-----	26	28	26
Handtools-----	19	3	19
Stepping or kneeling on sharp or loose objects--	19	2	19
Striking or bumping against objects-----	15	5	15
Haulage-----	206	13	205
Explosions of gas or dust-----	1,645	-	1,645
Explosives-----	295	-	295
Electricity-----	50	-	50
Machinery-----	104	16	104
Suffocation (no flame or smoldering)-----	2,002	-	2,002
Fires or suffocation from fires-----	2,708	-	2,708
Miscellaneous causes-----	39	43	39
Total-----	115	105	115
Surface:			
Sliding or falling material or objects-----	396	-	396
Slips or falls of persons-----	88	-	88
Handling material-----	64	7	63
Handtools-----	37	-	37
Stepping or kneeling on sharp or loose objects--	10	-	10
Striking or bumping against objects-----	19	-	19
Haulage-----	168	-	168
Electricity-----	321	-	321
Machinery-----	287	39	282
Suffocation (no flame or smoldering)-----	5	-	5
Fires or suffocation from fires-----	26	-	26
Miscellaneous causes-----	21	-	21
Total-----	119	13	118
Total, underground mines-----	115	100	115
Strip mines:			
Falls of face or side-----	336	61	323
Sliding or falling material or objects-----	55	109	66
Slips or falls of persons-----	28	26	27
Handling material-----	49	27	46
Handtools-----	19	571	71
Stepping or kneeling on sharp or loose objects--	21	51	25
Striking or bumping against objects-----	36	-	36
Haulage-----	312	309	311
Explosions of gas or dust-----	12	-	12
Explosives-----	681	-	681
Electricity-----	585	-	585
Machinery-----	264	63	255
Suffocation (no flame or smoldering)-----	-	-	-
Fires or suffocation from fires-----	4	6,000	2,003
Miscellaneous causes-----	14	11	14
Total-----	120	171	125

TABLE 13. - Average severity of all disabling injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1972 - Continued

Principal cause of injury	Bituminous coal mines	Pennsylvania anthracite mines	All coal mines
Other surface mining: ^{1/}			
Falls of face or side-----	124	-	124
Sliding or falling material or objects-----	21	32	29
Slips or falls of persons-----	37	16	28
Handling material-----	544	4	467
Handtools-----	26	6	17
Stepping or kneeling on sharp or loose objects---	71	-	71
Striking or bumping against objects-----	8	-	8
Haulage-----	8	12	8
Electricity-----	1	-	1
Machinery-----	16	-	16
Miscellaneous causes-----	4	24	8
Total-----	149	16	120
Total, surface-----	122	156	125
Total, mining-----	116	136	116
Independent shops and yards:			
Sliding or falling material or objects-----	10	4	8
Slips or falls of persons-----	12	-	12
Handling material-----	61	-	61
Handtools-----	2	-	2
Stepping or kneeling on sharp or loose objects---	-	-	-
Haulage-----	3	-	3
Electricity-----	207	-	207
Machinery-----	107	-	107
Miscellaneous causes-----	7	3	6
Total-----	44	4	42
Mechanical cleaning plants:			
Sliding or falling material or objects-----	34	62	41
Slips or falls of persons-----	42	36	41
Handling material-----	29	72	38
Handtools-----	30	7	25
Stepping or kneeling on sharp or loose objects---	20	18	20
Striking or bumping against objects-----	9	6	9
Haulage-----	275	66	237
Explosions of gas or dust-----	80	-	80
Explosives-----	129	-	129
Electricity-----	447	-	447
Machinery-----	434	30	400
Suffocation (no flame or smoldering)-----	1	-	1
Fires or suffocation from fires-----	2	-	2
Miscellaneous causes-----	10	19	12
Total-----	123	49	110
Grand total-----	116	109	116

^{1/} Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 14. - Number and average severity of injuries at bituminous coal mines, by occupation at the time of injury, general work location, and degree of injury, 1972

Occupation at time of injury and general work location	Number of injuries							Distri- bution of all disabling injuries percent	Average severity				
	Fatal	Nonfatal disabling				All disabling injuries	Non- disabling injuries		All injuries	Permanent partial injuries	Temporary total injuries	All disabling injuries	
		Permanent		Temporary total	All nonfatal disabling								
		Total	Partial										
Underground mines:													
Continuous miner operators/helpers-----	15	2	5	644	651	666	744	1,410	1,434	27	190		
Cutting-machine operators/helpers-----	3	-	4	190	194	197	161	358	218	28	123		
Loading machine operators/helpers-----	14	-	5	405	410	424	419	843	816	46	251		
Roof bolters/helpers-----	5	1	37	1,477	1,515	1,520	1,779	3,299	689	30	69		
Timbermen and jacksetters-----	6	-	5	419	424	430	337	767	190	30	115		
Belt and boom operators-----	4	1	4	435	440	444	446	890	511	22	94		
Trainers-----	9	-	14	414	428	437	588	1,025	1,108	34	192		
Shuttlescoop operators-----	12	1	7	968	976	988	1,073	2,061	202	30	110		
Electricians/helpers-----	1	-	3	258	261	262	321	583	805	27	59		
Laborers-----	14	-	21	1,297	1,318	1,332	1,407	2,739	252	29	95		
Mechanics, oilers and greasers-----	7	-	7	699	706	713	1,314	2,027	1,109	26	95		
Supervisors and technical-----	5	-	11	254	265	270	413	683	436	30	157		
Other, not elsewhere classified-----	26	1	30	2,132	2,163	2,189	2,434	4,623	462	29	109		
Total or average-----	121	6	153	9,592	9,751	9,872	11,436	21,308	599	30	115		
Surface:													
Bulldozer, grader, mobile equipment operators-----	1	-	1	20	21	22	24	46	32	45	315		
Car droppers-----	-	-	-	35	35	35	44	79	-	33	33		
Electricians/helpers-----	-	-	-	30	30	30	71	101	-	28	28		
Laborers-----	1	-	2	88	90	91	138	229	300	24	95		
Mechanics/helpers-----	1	1	2	98	101	102	273	375	600	33	161		
Motormen and trainmen-----	1	-	-	16	16	17	30	47	-	25	376		
Supervisors and technical-----	-	-	-	27	27	27	69	96	-	41	41		
Truck drivers-----	2	-	-	27	27	29	30	59	-	19	432		
Other, not elsewhere classified-----	-	-	6	194	200	200	379	579	1,172	25	60		
Total or average-----	6	1	11	535	547	553	1,058	1,611	806	28	119		
Total or average, underground mines (bituminous)-----	127	7	164	10,127	10,298	10,425	12,494	22,919	613	30	115		

TABLE 14. - Number and average severity of injuries at bituminous coal mines, by occupation at the time of injury, general work location, and degree of injury, 1972 - Continued

Occupation at time of injury and general work location	Number of injuries							Distri- bution of all injuries percent	Average severity			
	Fatal	Nonfatal disabling				All disabling injuries	Non- disabling injuries		All injuries	Permanent partial injuries	Temporary total injuries	All disabling injuries
		Permanent	Temporary total		All nonfatal disabling							
			Total	Partial								
Surface mines (includes strip, auger, culm bank, dredge and independent shops and yards):												
Auger operators/helpers-----	-	-	-	39	39	22	61	3.0	-	20	20	
Bulldozer, grader, mobile equipment operators-----	3	-	4	176	180	207	390	14.2	229	29	131	
Drillers/helpers-----	-	-	4	48	52	70	122	4.0	86	20	25	
Electricians/helpers-----	2	-	-	32	32	34	110	2.6	-	16	368	
Laborers-----	1	-	6	141	147	296	444	11.5	260	24	74	
Mechanics/helpers-----	1	-	2	164	166	385	552	13.0	1,620	23	78	
Oilers and greasers-----	1	-	1	122	123	195	319	9.6	135	31	80	
Power shovel and dragline operators-----	-	-	3	74	77	175	252	6.0	78	18	20	
Supervisors and technical-----	1	-	2	41	43	119	163	3.4	318	32	180	
Truck drivers-----	4	-	2	98	100	131	235	8.1	188	25	258	
Welders-----	4	-	3	136	139	344	487	11.1	200	23	194	
Other, not elsewhere classified-----	2	-	3	169	172	258	432	13.5	255	26	98	
Total or average-----	19	-	30	1,240	1,270	2,312	3,601	-	293	25	119	
Mechanical cleaning plants:												
Bulldozer, grader, mobile equipment operators-----	1	-	-	22	22	23	54	5.1	-	34	293	
Car droppers-----	1	-	-	47	47	48	78	10.6	-	21	145	
Cleaning equipment operators-----	-	-	2	13	15	15	49	3.3	292	27	62	
Laborers-----	-	-	2	86	88	88	141	19.5	85	39	40	
Mechanics, oilers and greasers-----	1	-	1	88	89	90	219	20.0	150	26	94	
Supervisors and technical-----	1	-	1	16	17	18	70	4.0	60	16	351	
Tipple, scalper-screen operators-----	1	-	27	27	28	37	65	6.2	-	40	253	
Truck drivers-----	1	-	20	20	21	38	59	4.7	-	24	308	
Welders-----	1	-	26	26	26	50	76	5.8	-	27	27	
Other, not elsewhere classified-----	1	-	1	92	93	94	199	20.8	100	25	89	
Total or average-----	7	-	7	437	444	451	894	-	152	29	123	
Grand total or average (bituminous)-----	153	7	201	11,804	12,012	12,165	15,700	-	549	29	116	

TABLE 15. - Number and average severity of injuries at Pennsylvania anthracite mines, by occupation at the time of injury, general work location, and degree of injury, 1972

Occupation at time of injury and general work location	Number of injuries							Distri- bution of all disabling injuries percent	Average severity		
	Fatal	Nonfatal disabling			All disabling injuries	Non- disabling injuries	All injuries		Permanent partial injuries	Temporary total injuries	All disabling injuries
		Permanent	Temporary total	All nonfatal disabling							
Underground mines: Underground: Continuous miner operators/helpers----- Belt and boom operators----- Laborers----- Supervisors and technical----- Other, not elsewhere classified----- Total or average-----	1 - - - - - - 1	- - 67 2 3 - - 72	- - - - - - - 72	1 - 67 2 3 - - 73	- - 42 7 2 - 52	1 1 109 9 5 - 125	1 - - - - - - -	- - 25 13 9 - 24	- - - - - - - -	6,000 - 25 13 9 - 105	
Surface: Laborers----- Mechanics/helpers----- Other, not elsewhere classified----- Total or average-----	- - - - - - - -	- - 2 2 5 - - -	1 2 2 5 - - - -	1 2 2 5 - - - -	2 - 2 4 - - - -	3 2 4 - 9 - -	20.0 40.0 40.0 - - - -	- 5 1 30 - 13	- - - - - - -	5 1 30 - 13	
Total or average, underground mines (anthracite)---	1	-	77	77	78	56	134	-	23	100	
Surface mines (includes strip, auger, culm bank, dredge, and independent shops and yards): Auger operators/helpers----- Bulldozer, grader, mobile equipment operators----- Drillers/helpers----- Electricians/helpers----- Laborers----- Mechanics/helpers----- Oilers and greasers----- Power shovel and dragline operators----- Supervisors and technical----- Truck drivers----- Welders----- Other, not elsewhere classified----- Total or average-----	- - 1 - - - - - - - - - 1	- - - - - - - - - - - - -	1 13 8 - - 20 14 18 12 5 30 11 9	1 13 8 - - 21 14 18 13 3 30 11 9	1 13 9 - - 21 14 18 13 - 5 11 10	1 21 16 3 47 32 39 38 16 40 43 19	- - - - - 75 - - - - - - -	- - - - - 26 21 18 10 97	187 27 706 - - 20 37 27 26 21 18 10 97	187 27 706 - - 22 37 27 486 21 18 10 688	
Total or average-----	2	1	141	143	145	170	315	-	30	154	

TABLE 15. - Number and average severity of injuries at Pennsylvania anthracite mines, by occupation at the time of injury, general work location, and degree of injury, 1972 - Continued

Occupation at time of injury and general work location	Number of injuries							Distri- bution of all disabling injuries percent	Average severity		
	Fatal	Nonfatal disabling			All disabling injuries	Non- disabling injuries	All injuries		Permanent partial injuries	Temporary total injuries	All disabling injuries
		Permanent	Temporary total	All nonfatal disabling							
Mechanical cleaning plants: Bulldozer, grader, mobile equipment operators----- Car droppers----- Cleaning equipment operators----- Laborers----- Mechanics, oilers and greasers----- Supervisors and technical----- Tipple, scalper-screen operators----- Truck drivers----- Welders----- Other, not elsewhere classified----- Total or average----- Grand total or average-----	- -										

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,
by general work location, 1972

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Underground:						
First shift 1/						
Hour of shift:						
1st-----	2	292	294	6.9	288	582
2nd-----	6	677	683	16.1	617	1,300
3rd-----	7	613	620	14.6	770	1,390
4th-----	6	584	590	13.9	705	1,295
5th-----	4	327	331	7.8	360	691
6th-----	9	484	493	11.6	584	1,077
7th-----	7	581	588	13.9	752	1,340
8th-----	12	414	426	10.1	422	848
9th-----	2	100	102	2.4	72	174
10th and over-----	5	103	108	2.6	91	199
Total first shift----	60	4,175	4,235	-	4,661	8,896
Second shift 2/						
Hour of shift:						
1st-----	2	199	201	5.8	206	407
2nd-----	3	453	456	13.2	453	909
3rd-----	6	486	492	14.2	566	1,058
4th-----	3	492	495	14.3	625	1,120
5th-----	12	420	432	12.5	520	952
6th-----	5	446	451	13.1	567	1,018
7th-----	6	472	478	13.8	495	973
8th-----	-	259	259	7.5	304	563
9th-----	1	59	60	1.7	36	96
10th and over-----	1	128	129	3.7	115	244
Total second shift----	39	3,414	3,453	-	3,887	7,340
Third shift 3/						
Hour of shift:						
1st-----	1	162	163	7.5	196	359
2nd-----	4	315	319	14.6	388	707
3rd-----	3	337	340	15.6	447	787
4th-----	3	324	327	15.0	491	818
5th-----	3	278	281	12.9	394	675
6th-----	2	252	254	11.6	395	649
7th-----	4	253	257	11.8	295	552
8th-----	2	152	154	7.1	187	341
9th-----	-	31	31	1.4	29	60
10th and over-----	-	58	58	2.7	66	124
Total third shift----	22	2,162	2,184	-	2,888	5,072
All shifts						
Hour of shift:						
1st-----	5	653	658	6.7	690	1,348
2nd-----	13	1,445	1,458	14.8	1,458	2,916
3rd-----	16	1,436	1,452	14.7	1,783	3,235
4th-----	12	1,400	1,412	14.3	1,821	3,233
5th-----	19	1,025	1,044	10.6	1,274	2,318
6th-----	16	1,182	1,198	12.1	1,546	2,744
7th-----	17	1,306	1,323	13.4	1,542	2,865
8th-----	14	825	839	8.5	913	1,752
9th-----	3	190	193	2.0	137	330
10th and over-----	6	289	295	3.0	272	567
Total all shifts----	121	9,751	9,872	-	11,436	21,308

See footnotes at end of table.

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Surface at underground:						
First shift 1/						
Hour of shift:						
1st-----	2	37	39	12.1	57	96
2nd-----	-	51	51	15.8	102	153
3rd-----	1	30	31	9.6	109	140
4th-----	-	46	46	14.3	94	140
5th-----	-	26	26	8.1	32	58
6th-----	-	28	28	8.7	72	100
7th-----	-	44	44	13.7	93	137
8th-----	1	29	30	9.3	52	82
9th-----	-	12	12	3.7	19	31
10th and over-----	-	15	15	4.7	22	37
Total first shift----	4	318	322	-	652	974
Second shift 2/						
Hour of shift:						
1st-----	-	18	18	11.5	26	44
2nd-----	-	26	26	16.7	39	65
3rd-----	1	16	17	10.9	33	50
4th-----	-	18	18	11.5	37	55
5th-----	-	23	23	14.7	36	59
6th-----	-	10	10	6.4	34	44
7th-----	1	15	16	10.3	27	43
8th-----	-	15	15	9.6	15	30
9th-----	-	8	8	5.1	5	13
10th and over-----	-	5	5	3.2	9	14
Total second shift----	2	154	156	-	261	417
Third shift 3/						
Hour of shift:						
1st-----	-	10	10	13.3	19	29
2nd-----	-	23	23	30.7	18	41
3rd-----	-	7	7	9.3	25	32
4th-----	-	6	6	8.0	12	18
5th-----	-	6	6	8.0	14	20
6th-----	-	8	8	10.7	18	26
7th-----	-	3	3	4.0	15	18
8th-----	-	4	4	5.3	16	20
9th-----	-	4	4	5.3	2	6
10th and over-----	-	4	4	5.3	6	10
Total third shift----	-	75	75	-	145	220
All shifts						
Hour of shift:						
1st-----	2	65	67	12.1	102	169
2nd-----	-	100	100	18.1	159	259
3rd-----	2	53	55	9.9	167	222
4th-----	-	70	70	12.7	143	213
5th-----	-	55	55	9.9	82	137
6th-----	-	46	46	8.3	124	170
7th-----	1	62	63	11.4	135	198
8th-----	1	48	49	8.9	83	132
9th-----	-	24	24	4.3	26	50
10th and over-----	-	24	24	4.3	37	61
Total all shifts----	6	547	553	-	1,058	1,611

See footnotes at end of table.

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Strip:						
First shift 1/						
Hour of shift:						
1st-----	3	68	71	8.9	83	154
2nd-----	1	112	113	14.2	175	288
3rd-----	1	108	109	13.7	219	328
4th-----	2	101	103	13.0	189	292
5th-----	-	72	72	9.1	101	173
6th-----	1	67	68	8.6	106	174
7th-----	-	92	92	11.6	191	283
8th-----	-	89	89	11.2	144	233
9th-----	-	39	39	4.9	48	87
10th and over-----	1	37	38	4.8	40	78
Total first shift-----	9	785	794	-	1,296	2,090
Second shift 2/						
Hour of shift:						
1st-----	-	37	37	12.8	57	94
2nd-----	3	51	54	18.8	82	136
3rd-----	1	30	31	10.8	84	115
4th-----	-	30	30	10.4	67	97
5th-----	-	27	27	9.4	72	99
6th-----	1	28	29	10.1	76	105
7th-----	1	23	24	8.3	70	94
8th-----	-	23	23	8.0	36	59
9th-----	1	9	10	3.5	5	15
10th and over-----	-	23	23	8.0	27	50
Total second shift-----	7	281	288	-	576	864
Third shift 3/						
Hour of shift:						
1st-----	-	7	7	6.1	19	26
2nd-----	-	20	20	17.5	42	62
3rd-----	1	20	21	18.4	37	58
4th-----	-	13	13	11.4	37	50
5th-----	-	7	7	6.1	32	39
6th-----	-	13	13	11.4	33	46
7th-----	1	15	16	14.0	30	46
8th-----	-	12	12	10.5	15	27
9th-----	-	-	-	-	6	6
10th and over-----	-	5	5	4.4	10	15
Total third shift-----	2	112	114	-	261	375
All shifts						
Hour of shift:						
1st-----	3	112	115	9.6	159	274
2nd-----	4	183	187	15.6	299	486
3rd-----	3	158	161	13.5	340	501
4th-----	2	144	146	12.2	293	439
5th-----	-	106	106	8.9	205	311
6th-----	2	108	110	9.2	215	325
7th-----	2	130	132	11.0	291	423
8th-----	-	124	124	10.4	195	319
9th-----	1	48	49	4.1	59	108
10th and over-----	1	65	66	5.5	77	143
Total all shifts-----	18	1,178	1,196	-	2,133	3,329

See footnotes at end of table.

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Auger:						
First shift ^{1/}						
Hour of shift:						
1st-----	-	2	2	4.8	4	6
2nd-----	-	4	4	9.5	3	7
3rd-----	-	3	3	7.1	3	6
4th-----	-	5	5	11.9	6	11
5th-----	-	4	4	9.5	3	7
6th-----	-	-	-	-	-	-
7th-----	-	10	10	23.8	3	13
8th-----	-	9	9	21.4	8	17
9th-----	1	3	4	9.5	2	6
10th and over-----	-	1	1	2.4	3	4
Total first shift----	1	41	42	-	35	77
Second shift ^{2/}						
Hour of shift:						
1st-----	-	1	1	12.5	1	2
2nd-----	-	3	3	37.5	1	4
3rd-----	-	1	1	12.5	1	2
4th-----	-	-	-	-	1	1
5th-----	-	-	-	-	-	-
6th-----	-	1	1	12.5	1	2
7th-----	-	-	-	-	-	-
8th-----	-	1	1	12.5	-	1
9th-----	-	-	-	-	-	-
10th and over-----	-	1	1	12.5	-	1
Total second shift----	-	8	8	-	5	13
Third shift ^{3/}						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total third shift----	-	-	-	-	-	-
All shifts						
Hour of shift:						
1st-----	-	3	3	6.0	5	8
2nd-----	-	7	7	14.0	4	11
3rd-----	-	4	4	8.0	4	8
4th-----	-	5	5	10.0	7	12
5th-----	-	4	4	8.0	3	7
6th-----	-	1	1	2.0	1	2
7th-----	-	10	10	20.0	3	13
8th-----	-	10	10	20.0	8	18
9th-----	1	3	4	8.0	2	6
10th and over-----	-	2	2	4.0	3	5
Total all shifts----	1	49	50	-	40	90

See footnotes at end of table.

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Independent shops and yards:						
First shift <u>1/</u>						
Hour of shift:						
1st-----	-	2	2	6.7	6	8
2nd-----	-	6	6	20.0	11	17
3rd-----	-	4	4	13.3	19	23
4th-----	-	2	2	6.7	13	15
5th-----	-	3	3	10.0	7	10
6th-----	-	5	5	16.7	9	14
7th-----	-	4	4	13.3	14	18
8th-----	-	3	3	10.0	6	9
9th-----	-	-	-	-	1	1
10th and over-----	-	1	1	3.3	4	5
Total first shift----	-	30	30	-	90	120
Second shift <u>2/</u>						
Hour of shift:						
1st-----	-	1	1	10.0	4	5
2nd-----	-	2	2	20.0	4	6
3rd-----	-	2	2	20.0	2	4
4th-----	-	1	1	10.0	5	6
5th-----	-	-	-	-	2	2
6th-----	-	2	2	20.0	4	6
7th-----	-	-	-	-	12	12
8th-----	-	1	1	10.0	4	5
9th-----	-	-	-	-	-	-
10th and over-----	-	1	1	10.0	1	2
Total second shift----	-	10	10	-	38	48
Third shift <u>3/</u>						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	1	1	33.3	4	5
3rd-----	-	1	1	33.3	2	3
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	2	2
6th-----	-	-	-	-	1	1
7th-----	-	-	-	-	2	2
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	1	1	33.3	-	1
Total third shift----	-	3	3	-	11	14
All shifts						
Hour of shift:						
1st-----	-	3	3	7.0	10	13
2nd-----	-	9	9	20.9	19	28
3rd-----	-	7	7	16.3	23	30
4th-----	-	3	3	7.0	18	21
5th-----	-	3	3	7.0	11	14
6th-----	-	7	7	16.3	14	21
7th-----	-	4	4	9.3	28	32
8th-----	-	4	4	9.3	10	14
9th-----	-	-	-	-	1	1
10th and over-----	-	3	3	7.0	5	8
Total all shifts----	-	43	43	-	139	182

See footnotes at end of table.

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Mechanical cleaning plants:						
First shift 1/						
Hour of shift:						
1st-----	2	19	21	8.6	42	63
2nd-----	-	41	41	16.8	75	116
3rd-----	1	33	34	13.9	90	124
4th-----	-	34	34	13.9	68	102
5th-----	1	20	21	8.6	28	49
6th-----	-	24	24	9.8	54	78
7th-----	-	27	27	11.1	63	90
8th-----	-	24	24	9.8	45	69
9th-----	-	8	8	3.3	17	25
10th and over-----	-	10	10	4.1	17	27
Total first shift----	4	240	244	-	499	743
Second shift 2/						
Hour of shift:						
1st-----	1	7	8	6.5	26	34
2nd-----	-	17	17	13.7	35	52
3rd-----	-	19	19	15.3	40	59
4th-----	1	19	20	16.1	25	45
5th-----	-	17	17	13.7	29	46
6th-----	-	13	13	10.5	28	41
7th-----	-	8	8	6.5	22	30
8th-----	-	7	7	5.6	19	26
9th-----	-	6	6	4.8	2	8
10th and over-----	-	9	9	7.3	15	24
Total second shift----	2	122	124	-	241	365
Third shift 3/						
Hour of shift:						
1st-----	-	10	10	12.0	13	23
2nd-----	-	14	14	16.9	20	34
3rd-----	-	5	5	6.0	33	38
4th-----	-	13	13	15.7	22	35
5th-----	-	11	11	13.3	17	28
6th-----	-	10	10	12.0	20	30
7th-----	1	5	6	7.2	21	27
8th-----	-	4	4	4.8	3	7
9th-----	-	5	5	6.0	3	8
10th and over-----	-	5	5	6.0	2	7
Total third shift----	1	82	83	-	154	237
All shifts						
Hour of shift:						
1st-----	3	36	39	8.6	81	120
2nd-----	-	72	72	16.0	130	202
3rd-----	1	57	58	12.9	163	221
4th-----	1	66	67	14.9	115	182
5th-----	1	48	49	10.9	74	123
6th-----	-	47	47	10.4	102	149
7th-----	1	40	41	9.1	106	147
8th-----	-	35	35	7.8	67	102
9th-----	-	19	19	4.2	22	41
10th and over-----	-	24	24	5.3	34	58
Total all shifts----	7	444	451	-	894	1,345

See footnotes at end of table.

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
All work locations:						
First shift <u>1</u> /						
Hour of shift:						
1st-----	9	420	429	7.6	480	909
2nd-----	7	891	898	15.8	983	1,881
3rd-----	10	791	801	14.1	1,210	2,011
4th-----	8	772	780	13.8	1,075	1,855
5th-----	5	452	457	8.1	531	988
6th-----	10	608	618	10.9	825	1,443
7th-----	7	758	765	13.5	1,116	1,881
8th-----	13	568	581	10.3	677	1,258
9th-----	3	162	165	2.9	159	324
10th and over-----	6	167	173	3.1	177	350
Total first shift----	78	5,589	5,667	-	7,233	12,900
Second shift <u>2</u> /						
Hour of shift:						
1st-----	3	263	266	6.6	320	586
2nd-----	6	552	558	13.8	614	1,172
3rd-----	8	554	562	13.9	726	1,288
4th-----	4	560	564	14.0	760	1,324
5th-----	12	487	499	12.4	659	1,158
6th-----	6	500	506	12.5	710	1,216
7th-----	8	518	526	13.0	626	1,152
8th-----	-	306	306	7.6	378	684
9th-----	2	82	84	2.1	48	132
10th and over-----	1	167	168	4.2	167	335
Total second shift----	50	3,989	4,039	-	5,008	9,047
Third shift <u>3</u> /						
Hour of shift:						
1st-----	1	189	190	7.7	247	437
2nd-----	4	373	377	15.3	472	849
3rd-----	4	370	374	15.2	544	918
4th-----	3	356	359	14.6	562	921
5th-----	3	302	305	12.4	459	764
6th-----	2	283	285	11.6	467	752
7th-----	6	276	282	11.5	363	645
8th-----	2	172	174	7.1	221	395
9th-----	-	40	40	1.6	40	80
10th and over-----	-	73	73	3.0	84	157
Total third shift----	25	2,434	2,459	-	3,459	5,918
All shifts						
Hour of shift:						
1st-----	13	872	885	7.3	1,047	1,932
2nd-----	17	1,816	1,833	15.1	2,069	3,902
3rd-----	22	1,715	1,737	14.3	2,480	4,217
4th-----	15	1,688	1,703	14.0	2,397	4,100
5th-----	20	1,241	1,261	10.4	1,649	2,910
6th-----	18	1,391	1,409	11.6	2,002	3,411
7th-----	21	1,552	1,573	12.9	2,105	3,678
8th-----	15	1,046	1,061	8.7	1,276	2,337
9th-----	5	284	289	2.4	247	536
10th and over-----	7	407	414	3.4	428	842
Total all shifts-----	153	12,012	12,165	-	15,700	27,865

^{1/} Work shift starting anytime between 4:00 A.M. and 11:59 A.M.

^{2/} Work shift starting anytime between 12:00 noon and 7:59 P.M.

^{3/} Work shift starting anytime between 8:00 P.M. and 3:59 A.M.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,
by general work location, 1972

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Underground:						
First shift 1/						
Hour of shift:						
1st-----	-	4	4	8.0	3	7
2nd-----	-	2	2	4.0	3	5
3rd-----	-	8	8	16.0	3	11
4th-----	-	8	8	16.0	8	16
5th-----	-	7	7	14.0	4	11
6th-----	1	4	5	10.0	4	9
7th-----	-	10	10	20.0	1	11
8th-----	-	4	4	8.0	2	6
9th-----	-	-	-	-	-	-
10th and over-----	-	2	2	4.0	-	2
Total first shift----	1	49	50	-	28	78
Second shift 2/						
Hour of shift:						
1st-----	-	3	3	15.0	3	6
2nd-----	-	3	3	15.0	-	3
3rd-----	-	3	3	15.0	2	5
4th-----	-	3	3	15.0	1	4
5th-----	-	4	4	20.0	7	11
6th-----	-	2	2	10.0	1	3
7th-----	-	2	2	10.0	1	3
8th-----	-	-	-	-	2	2
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	2	2
Total second shift----	-	20	20	-	19	39
Third shift 3/						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	1	1
3rd-----	-	-	-	-	1	1
4th-----	-	1	1	33.3	1	2
5th-----	-	2	2	66.6	1	3
6th-----	-	-	-	-	1	1
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total third shift----	-	3	3	-	5	8
All shifts						
Hour of shift:						
1st-----	-	7	7	9.6	6	13
2nd-----	-	5	5	6.8	4	9
3rd-----	-	11	11	15.1	6	17
4th-----	-	12	12	16.4	10	22
5th-----	-	13	13	17.8	12	25
6th-----	1	6	7	9.6	6	13
7th-----	-	12	12	16.4	2	14
8th-----	-	4	4	5.5	4	8
9th-----	-	-	-	-	-	-
10th and over-----	-	2	2	2.7	2	4
Total all shifts----	1	72	73	-	52	125

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Surface at underground:						
First shift ^{1/}						
Hour of shift						
1st-----	-	-	-	-	2	2
2nd-----	-	1	1	20.0	1	2
3rd-----	-	1	1	20.0	-	1
4th-----	-	2	2	40.0	-	2
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	1	1
7th-----	-	1	1	20.0	-	1
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total first shift----	-	5	5	-	4	9
Second shift ^{2/}						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total second shift----	-	-	-	-	-	-
Third shift ^{3/}						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total third shift----	-	-	-	-	-	-
All shifts						
Hour of shift:						
1st-----	-	-	-	-	2	2
2nd-----	-	1	1	20.0	1	2
3rd-----	-	1	1	20.0	-	1
4th-----	-	2	2	40.0	-	2
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	1	1
7th-----	-	1	1	20.0	-	1
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total all shifts----	-	5	5	-	4	9

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Strip:						
First shift <u>1/</u>						
Hour of shift:						
1st-----	-	7	7	7.6	7	14
2nd-----	-	9	9	9.8	13	22
3rd-----	-	13	13	14.1	9	22
4th-----	-	15	15	16.3	18	33
5th-----	-	10	10	10.9	21	31
6th-----	-	8	8	8.7	2	10
7th-----	-	18	18	19.6	12	30
8th-----	1	9	10	10.9	14	24
9th-----	-	-	-	-	3	3
10th and over-----	-	2	2	2.2	1	3
Total first shift-----	1	91	92	-	100	192
Second shift <u>2/</u>						
Hour of shift:						
1st-----	-	5	5	17.9	2	7
2nd-----	-	4	4	14.3	3	7
3rd-----	-	4	4	14.3	4	8
4th-----	-	4	4	14.3	7	11
5th-----	-	5	5	17.9	5	10
6th-----	-	3	3	10.7	2	5
7th-----	-	1	1	3.6	3	4
8th-----	-	1	1	3.6	3	4
9th-----	-	-	-	-	1	1
10th and over-----	-	1	1	3.6	-	1
Total second shift-----	-	28	28	-	30	58
Third shift <u>3/</u>						
Hour of shift:						
1st-----	-	2	2	22.2	1	3
2nd-----	1	2	3	33.3	2	5
3rd-----	-	1	1	11.1	1	2
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	2	2
6th-----	-	2	2	22.2	-	2
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	1	1
9th-----	-	-	-	-	-	-
10th and over-----	-	1	1	11.1	-	1
Total third shift-----	1	8	9	-	7	16
All shifts						
Hour of shift:						
1st-----	-	14	14	10.9	10	24
2nd-----	1	15	16	12.4	18	34
3rd-----	-	18	18	14.0	14	32
4th-----	-	19	19	14.7	25	44
5th-----	-	15	15	11.6	28	43
6th-----	-	13	13	10.1	4	17
7th-----	-	19	19	14.7	15	34
8th-----	1	10	11	8.5	18	29
9th-----	-	-	-	-	4	4
10th and over-----	-	4	4	3.1	1	5
Total all shifts-----	2	127	129	-	137	266

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Culm banks:						
First shift 1/						
Hour of shift:						
1st-----	-	1	1	14.3	-	1
2nd-----	-	-	-	-	1	1
3rd-----	-	1	1	14.3	-	1
4th-----	-	4	4	57.1	3	7
5th-----	-	-	-	-	2	2
6th-----	-	-	-	-	1	1
7th-----	-	-	-	-	1	1
8th-----	-	1	1	14.3	1	2
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total first shift---	-	7	7	-	9	16
Second shift 2/						
Hour of shift:						
1st-----	-	1	1	14.3	-	1
2nd-----	-	1	1	14.3	1	2
3rd-----	-	-	-	-	1	1
4th-----	-	1	1	14.3	-	1
5th-----	-	1	1	14.3	2	3
6th-----	-	2	2	28.6	-	2
7th-----	-	1	1	14.3	-	1
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total second shift--	-	7	7	-	4	11
Third shift 3/						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total third shift---	-	-	-	-	-	-
All shifts						
Hour of shift:						
1st-----	-	2	2	14.3	-	2
2nd-----	-	1	1	7.1	2	3
3rd-----	-	1	1	7.1	1	2
4th-----	-	5	5	35.7	3	8
5th-----	-	1	1	7.1	4	5
6th-----	-	2	2	14.3	1	3
7th-----	-	1	1	7.1	1	2
8th-----	-	1	1	7.1	1	2
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total all shifts---	-	14	14	-	13	27

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Dredges:						
First shift <u>1/</u>						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	2	2
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total first shift----	-	-	-	-	2	2
Second shift <u>2/</u>						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total second shift----	-	-	-	-	-	-
Third shift <u>3/</u>						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total third shift----	-	-	-	-	-	-
All shifts						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	2	2
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total all shifts----	-	-	-	-	2	2

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Independent shops and yards:						
First shift ^{1/}						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	1	1
4th-----	-	-	-	-	8	8
5th-----	-	-	-	-	2	2
6th-----	-	-	-	-	-	-
7th-----	-	1	1	50.0	-	1
8th-----	-	1	1	50.0	1	2
9th-----	-	-	-	-	1	1
10th and over-----	-	-	-	-	-	-
Total first shift----	-	2	2	-	13	15
Second shift ^{2/}						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	1	1
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	4	4
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total second shift----	-	-	-	-	5	5
Third shift ^{3/}						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total third shift----	-	-	-	-	-	-
All shifts						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	2	2
4th-----	-	-	-	-	8	8
5th-----	-	-	-	-	6	6
6th-----	-	-	-	-	-	-
7th-----	-	1	1	50.0	-	1
8th-----	-	1	1	50.0	1	2
9th-----	-	-	-	-	1	1
10th and over-----	-	-	-	-	-	-
Total all shifts----	-	2	2	-	18	20

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Mechanical cleaning plants:						
First shift <u>1/</u>						
Hour of shift:						
1st-----	-	7	7	10.1	13	20
2nd-----	-	7	7	10.1	11	18
3rd-----	-	7	7	10.1	10	17
4th-----	-	13	13	18.8	30	43
5th-----	-	10	10	14.5	15	25
6th-----	-	1	1	1.4	8	9
7th-----	-	12	12	17.4	18	30
8th-----	-	8	8	11.6	9	17
9th-----	-	1	1	1.4	7	8
10th and over-----	-	3	3	4.3	3	6
Total first shift-----	-	69	69	-	124	193
Second shift <u>2/</u>						
Hour of shift:						
1st-----	-	2	2	8.0	4	6
2nd-----	-	5	5	20.0	2	7
3rd-----	-	3	3	12.0	7	10
4th-----	-	2	2	8.0	3	5
5th-----	-	4	4	16.0	7	11
6th-----	-	3	3	12.0	7	10
7th-----	-	1	1	4.0	2	3
8th-----	-	3	3	12.0	3	6
9th-----	-	-	-	-	-	-
10th and over-----	-	2	2	8.0	2	4
Total second shift-----	-	25	25	-	37	62
Third shift <u>3/</u>						
Hour of shift:						
1st-----	-	-	-	-	1	1
2nd-----	-	1	1	33.3	-	1
3rd-----	-	-	-	-	1	1
4th-----	-	1	1	33.3	-	1
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	1	1	33.3	-	1
8th-----	-	-	-	-	1	1
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total third shift-----	-	3	3	-	3	6
All shifts						
Hour of shift:						
1st-----	-	9	9	9.3	18	27
2nd-----	-	13	13	13.4	13	26
3rd-----	-	10	10	10.3	18	28
4th-----	-	16	16	16.5	33	49
5th-----	-	14	14	14.4	22	36
6th-----	-	4	4	4.1	15	19
7th-----	-	14	14	14.4	20	34
8th-----	-	11	11	11.3	13	24
9th-----	-	1	1	1.0	7	8
10th and over-----	-	5	5	5.2	5	10
Total all shifts-----	-	97	97	-	164	261

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,
by general work location, 1972 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
All work locations:						
First shift ^{1/}						
Hour of shift:						
1st-----	-	19	19	8.4	23	42
2nd-----	-	18	18	8.0	30	48
3rd-----	-	30	30	13.3	24	54
4th-----	-	41	41	18.2	69	110
5th-----	-	29	29	12.9	44	73
6th-----	1	13	14	6.2	15	29
7th-----	-	41	41	18.2	33	74
8th-----	1	24	25	11.1	27	52
9th-----	-	1	1	.4	11	12
10th and over-----	-	7	7	3.1	4	11
Total first shift-----	2	223	225	-	280	505
Second shift ^{2/}						
Hour of shift:						
1st-----	-	11	11	13.8	9	20
2nd-----	-	13	13	16.2	6	19
3rd-----	-	10	10	12.5	15	25
4th-----	-	10	10	12.5	11	21
5th-----	-	14	14	17.5	25	39
6th-----	-	10	10	12.5	10	20
7th-----	-	5	5	6.2	6	11
8th-----	-	4	4	5.0	8	12
9th-----	-	-	-	-	1	1
10th and over-----	-	3	3	3.8	4	7
Total second shift-----	-	80	80	-	95	175
Third shift ^{3/}						
Hour of shift:						
1st-----	-	2	2	13.3	2	4
2nd-----	1	3	4	26.7	3	7
3rd-----	-	1	1	6.7	3	4
4th-----	-	2	2	13.3	1	3
5th-----	-	2	2	13.3	3	5
6th-----	-	2	2	13.3	1	3
7th-----	-	1	1	6.7	-	1
8th-----	-	-	-	-	2	2
9th-----	-	-	-	-	-	-
10th and over-----	-	1	1	6.7	-	1
Total third shift-----	1	14	15	-	15	30
All shifts						
Hour of shift:						
1st-----	-	32	32	10.0	34	66
2nd-----	1	34	35	10.9	39	74
3rd-----	-	41	41	12.8	42	83
4th-----	-	53	53	16.6	81	134
5th-----	-	45	45	14.1	72	117
6th-----	1	25	26	8.1	26	52
7th-----	-	47	47	14.7	39	86
8th-----	1	28	29	9.1	37	66
9th-----	-	1	1	.3	12	13
10th and over-----	-	11	11	3.4	8	19
Total all shifts-----	3	317	320	-	390	710

^{1/} Work shift starting anytime between 4:00 A.M. and 11:59 A.M.

^{2/} Work shift starting anytime between 12:00 noon and 7:59 P.M.

^{3/} Work shift starting anytime between 8:00 P.M. and 3:59 A.M.

TABLE 18. - Number of injuries, injury rates and average severity at bituminous coal mines in the United States, by part of body injured, 1972

General work location and part of body injured	Number of injuries										Ois- tribution of all dis- abling in- juries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity	
	Fatal	Nonfatal disabling				All dis- abling in- juries	Non- dis- abling in- juries	Fatal	Non- fatal dis- abling	All dis- abling		Non- fatal dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Perma- nent partial	Tem- porary total	All dis- abling		
		Nonfatal disabling																		
		Permanent		All non- fatal dis- abling															All dis- abling in- juries	
		Total	Part- tial	Temp- orary total	All non- fatal dis- abling														All dis- abling in- juries	All dis- abling in- juries
Underground mines:																				
Underground:																				
Head, face, neck (excl.)	20	1	-	714	715	735	1,974	7.4	0.12	4.21	4.33	7.30	707	131	838	-	23	194		
Eye	-	3	-	357	360	340	1,703	5.5	-	3.18	3.18	6.85	-	60	60	1,800	9	19		
Trunk (above wrist)	25	3	-	2,868	2,851	2,876	5,079	29.1	.15	16.8	16.95	12.98	884	195	1,538	-	34	92		
Arm (above wrist)	-	7	-	1,452	1,459	1,460	3,091	4.7	.01	2.70	2.71	3.72	35	386	386	2,718	31	85		
Wrist, hand, fingers	-	124	-	1,795	1,919	1,919	5,039	19.4	-	11.31	11.31	18.38	-	286	386	20	34	34		
Leg (above ankle)	-	1	7	1,227	1,235	1,235	2,902	12.5	-	7.28	7.28	7.47	-	445	445	3,429	37	61		
Ankle, foot, toes	-	6	1	1,191	1,197	1,197	2,348	12.1	.30	7.05	7.05	6.72	-	217	217	217	29	31		
Multiple	51	1	-	776	733	784	1,347	7.9	.30	4.32	4.62	3.32	1,803	301	2,104	1,915	46	455		
Unclassified (no data)	24	-	-	102	102	126	235	1.3	.14	.60	.74	.64	848	15	864	-	25	1,163		
Total or average	121	6	153	9,592	9,751	9,872	21,308	-	.71	57.45	58.17	67.38	4,278	2,424	6,701	599	30	115		
Surface:																				
Head, face, neck (excl.)	-	-	-	16	16	16	93	2.9	-	.95	.95	5.52	-	15	15	-	16	16		
Eye	-	-	-	40	40	40	151	7.2	-	2.38	2.38	8.97	-	28	28	-	12	12		
Trunk (above wrist)	-	-	-	182	182	182	381	32.9	-	10.81	10.81	11.82	-	296	296	-	27	27		
Arm (above wrist)	-	1	-	21	22	22	58	4.0	-	1.31	1.31	3.44	-	374	374	-	14	286		
Wrist, hand, fingers	-	8	-	72	80	80	390	14.5	-	4.75	4.75	18.41	-	242	242	354	17	51		
Leg (above ankle)	1	-	-	53	54	55	102	9.9	.06	3.21	3.27	6.06	356	304	660	3,000	40	202		
Ankle, foot, toes	-	1	1	89	90	90	87	16.3	-	5.34	5.34	5.17	-	208	208	35	39	39		
Multiple	3	-	-	55	56	59	50	10.7	.18	3.33	3.30	2.97	1,069	313	1,382	3,000	41	394		
Unclassified (no data)	2	-	-	7	7	9	17	1.6	.12	.42	.53	.48	713	5	718	-	12	1,343		
Total or average	6	1	11	535	547	553	1,611	-	.36	32.48	32.84	62.83	2,138	1,785	3,922	806	28	119		
Total or average, underground mines	127	7	164	10,127	10,298	10,425	22,919	-	.68	55.20	55.88	66.97	4,084	2,366	6,450	613	30	115		
Strip mines:																				
Head, face, neck (excl.)	2	-	-	64	64	66	288	5.5	.04	1.28	1.32	4.45	241	20	260	-	15	197		
Eye	-	-	-	87	87	87	480	32.3	.06	1.74	1.74	7.88	-	18	18	-	10	10		
Trunk (above wrist)	3	-	1	379	380	383	770	32.0	-	7.62	7.68	7.76	361	234	595	50	31	77		
Arm (above wrist)	-	1	-	134	135	135	213	5.4	-	1.30	1.30	2.97	-	88	88	3,000	22	68		
Wrist, hand, fingers	-	25	-	130	155	155	316	13.0	-	3.10	3.10	10.34	-	142	142	190	18	46		
Leg (above ankle)	-	-	-	142	142	142	232	11.9	-	2.85	2.85	4.65	-	66	66	-	23	23		
Ankle, foot, toes	-	-	-	151	151	151	271	12.6	-	3.03	3.03	2.41	1,082	75	70	-	23	23		
Multiple	9	-	-	114	114	123	213	10.3	.18	2.28	2.27	1.80	1,082	75	1,157	-	33	469		
Unclassified (no data)	4	-	-	20	20	24	49	2.0	.08	.40	.48	.50	481	11	492	-	28	1,023		
Total or average	18	-	27	1,151	1,178	1,196	3,329	-	.36	23.61	23.97	42.75	2,165	723	2,888	288	25	120		

TABLE 18. - Number of injuries, injury rates and average severity at bituminous coal mines in the United States, by part of body injured, 1972 - Continued

General work location and part of body injured	Number of injuries							Distri- bution of all in- juries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity			
	Fatal	Nonfatal disabling				All dis- abling in- juries	Non- dis- abling in- juries		All in- juries	Fatal	Non- fatal dis- abling	All dis- abling	Non- fatal dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Perma- nent partial	Tem- porary total	All dis- abling
		Total	Per- ma- nent partial	Tem- porary total	All non- fatal dis- abling														
Auger mines: Head, face, neck (excl. eye)----- Eye----- Trunk----- Arm (above wrist)----- Wrist, hand, fingers----- Leg (above ankle)----- Ankle, foot, toes----- Multiple----- Unclassified (no data)----- Total or average----- Total or average surface Total or average mining----- Independent shops and yards: Head, face, neck (excl. eye)----- Eye----- Trunk----- Arm (above wrist)----- Wrist, hand, fingers----- Leg (above ankle)----- Ankle, foot, toes----- Multiple----- Unclassified (no data)----- Total or average----- Mechanical cleaning plants: Head, face, neck (excl. eye)----- Eye----- Trunk----- Arm (above wrist)----- Wrist, hand, fingers----- Leg (above ankle)----- Ankle, foot, toes----- Multiple----- Unclassified (no data)----- Total or average----- Grand total or average-----	- 																		

1/ Less than 0.5

TABLE 19. - Number of injuries, injury rates and average severity at Pennsylvania anthracite mines,
by part of body injured, 1972

General work location and part of body injured	Number of injuries						Distri- bution of all dis- abling in- juries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity		
	Fatal	Nonfatal disabling				Non- dis- abling in- juries		Fatal	Non- fatal dis- abling	All dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Perma- nent partial	Tem- porary total	All dis- abling	
		Permanent	Temp- orary total dis- abling	All non- fatal dis- abling in- juries	All dis- abling in- juries												
																	Total
Underground mines:																	
Head, face, neck (excl. eye)-----	-	-	7	7	19	9.6	-	-	9.06	9.06	15.54	-	101	101	-	11	11
Eye-----	-	-	8	8	7	11.0	-	-	10.36	10.36	9.06	-	219	219	-	21	21
Trunk-----	-	-	17	17	10	23.3	-	-	22.01	22.01	12.95	-	570	570	-	26	26
Arm (above wrist)-----	-	-	2	2	3	2.7	-	-	2.59	2.59	3.88	-	39	39	-	15	15
Wrist, hand, fingers-----	-	-	11	11	10	15.1	-	-	14.24	14.24	12.95	-	265	265	-	19	19
Leg (above ankle)-----	-	-	10	10	5	13.7	-	-	12.95	12.95	6.47	-	282	282	-	22	22
Ankle, foot, toes-----	-	-	9	9	5	14	-	-	11.65	11.65	6.47	-	199	199	-	17	17
Multiple-----	-	-	6	6	6	8.2	-	-	7.77	7.77	-	-	484	484	-	62	62
Unclassified (no data)-----	-	-	2	2	3	4.1	-	-	1.29	2.59	3.88	-	7,768	7,811	-	16	16
Total or average-----	1	-	72	72	52	125	-	-	93.21	94.51	67.32	-	2,202	9,970	-	24	105
Surface:																	
Head, face, neck (excl. eye)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eye-----	-	-	2	2	2	40.0	-	-	9.22	9.22	-	-	9	9	-	1	1
Trunk-----	-	-	2	2	2	40.0	-	-	9.22	9.22	-	-	120	120	-	13	13
Arm (above wrist)-----	-	-	-	-	-	-	-	-	-	-	4.61	-	-	-	-	-	-
Wrist, hand, fingers-----	-	-	-	-	1	1	-	-	-	-	9.22	-	-	-	-	-	-
Leg (above ankle)-----	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-
Ankle, foot, toes-----	-	-	1	1	1	20.0	-	-	4.61	4.61	-	-	180	180	-	39	39
Multiple-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unclassified (no data)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average-----	-	-	5	5	4	9	-	-	23.05	23.05	18.44	-	309	309	-	13	13
Total or average, underground mines-----	1	-	77	77	56	134	-	-	77.83	78.84	56.60	-	1,787	7,852	-	23	100
Strip mines:																	
Head, face, neck (excl. eye)-----	-	-	6	7	10	5.4	-	-	2.65	2.65	3.79	-	2,303	2,303	-	14	869
Eye-----	-	-	15	15	28	11.6	-	-	5.68	5.68	10.61	-	23	23	-	4	4
Trunk-----	-	-	52	52	23	47.1	-	-	19.70	20.07	8.71	-	681	2,953	-	35	147
Arm (above wrist)-----	-	-	6	6	12	4.7	-	-	2.27	2.27	4.55	-	57	57	-	25	25
Wrist, hand, fingers-----	-	-	1	1	3	3.79	-	-	3.79	3.79	12.50	-	102	102	-	21	27
Leg (above ankle)-----	-	-	13	13	16	10.1	-	-	4.92	4.92	6.06	-	170	170	-	34	34
Ankle, foot, toes-----	-	-	14	14	9	23	-	-	5.30	5.30	3.41	-	378	378	-	71	71
Multiple-----	-	-	9	9	6	16	-	-	3.41	3.79	2.27	-	88	2,360	-	26	623
Unclassified (no data)-----	-	-	1	1	-	0.8	-	-	.38	.38	-	-	14	14	-	38	38
Total or average-----	2	1	125	127	137	266	-	-	48.10	48.86	51.89	-	3,815	8,360	-	32	171

TABLE 19. - Number of injuries, injury rates and average severity at Pennsylvania anthracite mines,
by part of body injured, 1972 - Continued

General work location and part of body injured	Number of injuries						Distri- bution of all in- juries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity		
	Fatal	Nonfatal disabling				All dis- abling in- juries		Non- dis- abling in- juries	All dis- abling in- juries	Fatal	Non- fatal dis- abling	All dis- abling	Non- fatal dis- abling	All dis- abling	Perma- nent partial	Ten- porary total	All dis- abling
		Permanent		Tempo- rary total	All non- fatal dis- abling												
		Total	Par- tial														
Culm banks:																	
Head, face, neck (excl.)	-	-	-	1	1	1	7.1	-	3.31	3.31	-	-	142	-	43	43	43
Eye)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk)-----	-	-	-	1	1	1	7.1	-	3.31	3.31	-	-	20	-	6	6	6
Arm (above wrist)-----	-	-	-	1	1	1	7.1	-	3.31	3.31	-	-	20	-	6	6	6
Wrist, hand, fingers-----	-	-	-	4	4	4	28.6	-	13.25	13.25	-	-	129	-	10	10	10
Leg (above ankle)-----	-	-	-	2	2	2	14.3	-	6.62	6.62	-	-	182	-	28	28	28
Ankle, foot, toes-----	-	-	-	1	1	1	7.1	-	3.31	3.31	-	-	7	-	2	2	2
Multiple-----	-	-	-	4	4	4	28.6	-	13.25	13.25	-	-	238	-	18	18	18
Unclassified (no data)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average-----	-	-	-	14	14	14	-	-	46.37	46.37	43.06	-	739	739	-	16	16
Dredges:																	
Head, face, neck (excl.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eye)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arm (above wrist)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wrist, hand, fingers-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leg (above ankle)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ankle, foot, toes-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multiple-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unclassified (no data)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average-----	-	-	-	-	-	-	-	-	-	-	43.69	-	-	-	-	-	-
Total or average, surface mining-----	2	1	1	139	141	143	-	0.67	47.19	47.86	50.87	4,016	3,446	7,462	75	30	156
Total or average mining-----	3	1	1	216	218	221	-	.75	54.81	55.57	52.30	4,526	3,033	7,559	75	28	136
Independent shops and yards:																	
Head, face, neck (excl.)	-	-	-	1	1	1	50.0	-	12.83	12.83	12.83	-	51	51	-	4	4
Eye)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk)-----	-	-	-	5	5	5	-	-	-	-	64.16	-	-	-	-	-	-
Arm (above wrist)-----	-	-	-	4	4	4	-	-	-	-	51.33	-	-	-	-	-	-
Wrist, hand, fingers-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leg (above ankle)-----	-	-	-	1	1	1	50.0	-	12.83	12.83	64.16	-	38	38	-	3	3
Ankle, foot, toes-----	-	-	-	2	2	2	-	-	-	-	25.67	-	-	-	-	-	-
Multiple-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unclassified (no data)-----	-	-	-	1	1	1	-	-	-	-	12.83	-	-	-	-	-	-
Total or average-----	-	-	-	2	2	2	-	-	25.67	25.67	230.99	-	90	90	-	4	4

TABLE 19. - Number of injuries, injury rates and average severity at Pennsylvania anthracite mines, by part of body injured, 1972 - Continued

General work location and part of body injured	Number of injuries							Distri- bution of all dis- abling in- juries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity			
	Fatal	Nonfatal disabling					All dis- abling in- juries		Non- fatal dis- abling in- juries	All dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Perma- nent partial	Tem- porary total	All dis- abling
		Total	Perma- nent partial	Tem- porary total	All fatal dis- abling	All non- fatal dis- abling													
Mechanical cleaning plants: Head, face, neck (excl. eye)-----	-	-	-	7	7	7	19	7.2	-	3.25	3.25	5.36	-	247	247	-	76	76	
Eye-----	-	-	-	6	6	6	32	6.2	-	2.78	2.78	12.06	-	8	8	-	3	3	
Trunk-----	-	-	-	28	28	28	67	28.9	-	12.98	12.98	18.09	-	-	977	977	-	75	75
Arm (above wrist)-----	-	-	-	6	6	6	7	6.2	-	2.78	2.78	3.25	-	-	132	132	-	48	48
Wrist, hand, fingers-----	-	-	-	14	15	15	42	15.5	-	6.96	6.96	19.48	-	-	304	304	400	18	44
Leg (above ankle)-----	-	-	-	11	11	11	28	11.3	-	5.10	5.10	7.88	-	-	181	181	-	36	36
Leg (below ankle)-----	-	-	-	17	17	17	11	17.5	-	7.88	7.88	5.10	-	-	266	266	-	34	34
Ankle, foot, toes-----	-	-	-	6	6	6	9	6.2	-	2.78	2.78	4.17	-	-	75	75	-	27	27
Multiple-----	-	-	-	1	1	1	1	1.0	-	.46	.46	.46	-	-	15	15	-	33	33
Unclassified (no data)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average-----	-	-	1	96	97	97	261	-	-	44.98	44.98	76.05	-	2,205	2,205	400	45	49	
Grand total or average-----	3	1	2	314	317	320	710	-	0.48	51.03	51.52	62.79	2,898	2,709	5,606	238	33	109	

TABLE 20. - Number of injuries and average severity by degree at bituminous coal mines in the United States,
by part of body and principal cause of injury, 1972

Part of body and principal cause of injury	Number of injuries								Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non- disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total	All nonfatal disabling						
		Total	Partial								
Head, face, neck (excl. eye):											
Falls of roof or back-----	10	-	-	119	119	129	186	315	-	23	486
Falls of face or rib-----	1	-	-	11	11	12	32	44	-	19	518
Pressure bumps or bursts-----	-	-	-	1	1	1	3	4	-	1	1
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	33	33	33	92	125	-	15	15
Slips or falls of persons-----	-	-	-	31	31	31	58	89	-	18	18
Handling material-----	-	-	-	99	99	99	245	344	-	23	23
Handtools-----	-	-	-	76	76	76	300	376	-	14	14
Stepping or kneeling on sharp or loose objects-----	-	-	-	1	1	1	1	2	-	1	1
Striking or bumping against objects-----	-	-	-	52	52	52	91	143	-	14	14
Haulage-----	6	-	-	203	203	209	258	467	-	31	203
Explosions of gas or dust-----	-	-	-	1	1	1	1	2	-	5	5
Explosives-----	-	-	-	11	11	11	13	24	-	23	23
Electricity-----	-	-	-	24	24	24	31	55	-	9	9
Machinery-----	6	1	-	136	137	143	204	347	-	20	313
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	2	2	2	3	5	-	2	2
Miscellaneous causes-----	-	-	-	23	23	23	115	138	-	11	11
Total or average-----	23	1	-	823	824	847	1,633	2,480	-	22	191
Eyes:											
Falls of roof or back-----	-	-	1	27	28	28	60	88	1,800	7	71
Falls of face or rib-----	-	-	-	7	7	7	12	19	-	3	3
Pressure bumps or bursts-----	-	-	-	1	1	1	3	4	-	1	1
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	10	10	10	50	60	-	4	4
Slips or falls of persons-----	-	-	-	2	2	2	2	4	-	3	3
Handling material-----	-	-	-	126	126	126	330	456	-	13	13
Handtools-----	-	-	1	105	106	106	236	342	1,800	17	34
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	-
Striking or bumping against objects-----	-	-	-	8	8	8	8	16	-	3	3
Haulage-----	-	-	-	36	36	36	111	147	-	7	7
Explosions of gas or dust-----	-	-	-	-	-	-	1	1	-	-	-
Explosives-----	-	-	-	3	3	3	6	9	-	10	10
Electricity-----	-	-	-	97	97	97	207	304	-	4	4
Machinery-----	-	-	-	122	122	122	286	408	-	5	5
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	1	1	1	-	1	-	9	9
Miscellaneous causes-----	-	-	1	160	161	161	562	723	1,800	8	19
Total or average-----	-	-	3	705	708	708	1,874	2,582	1,800	9	16
Trunk:											
Falls of roof or back-----	7	2	-	266	268	275	190	465	-	44	239
Falls of face or rib-----	4	-	-	94	94	98	87	185	-	39	283
Pressure bumps or bursts-----	-	-	-	1	1	1	-	1	-	3	3
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	1	-	-	30	30	31	63	94	-	18	211
Slips or falls of persons-----	-	-	-	448	448	448	447	895	-	33	33
Handling materials-----	-	-	-	1,501	1,501	1,501	1,208	2,709	-	30	30
Handtools-----	-	-	-	150	150	150	144	294	-	18	18
Stepping or kneeling on sharp or loose objects-----	-	-	-	22	22	22	29	51	-	24	24
Striking or bumping against objects-----	-	-	-	29	29	29	25	54	-	14	14
Haulage-----	12	1	-	523	524	536	407	943	-	39	184
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	8	8	8	8	16	-	26	26
Electricity-----	-	-	-	5	5	5	10	15	-	13	13
Machinery-----	6	-	1	373	374	380	302	682	50	36	130
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	2	2	2	3	5	-	9	9
Miscellaneous causes-----	-	-	-	125	125	125	78	203	-	30	30
Total or average-----	30	3	1	3,577	3,581	3,611	3,001	6,612	50	33	87

TABLE 20. - Number of injuries and average severity by degree at bituminous coal mines in the United States, by part of body and principal cause of injury, 1972 - Continued

Part of body and principal cause of injury	Number of injuries								Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total	All nonfatal disabling						
		Total	Partial								
Arm (above wrist):											
Falls of roof or back-----	-	-	-	84	84	84	83	167	-	32	32
Falls of face or rib-----	-	-	2	16	18	18	13	31	425	41	84
Pressure bumps or bursts-----	-	-	-	1	1	1	-	1	-	3	3
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	10	10	10	32	42	-	18	18
Slips or falls of persons-----	-	1	-	49	50	50	81	131	-	34	153
Handling material-----	-	-	2	82	84	84	192	276	313	15	22
Handtools-----	-	-	-	38	38	38	118	156	-	15	15
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	3	3	-	-	-
Striking or bumping against objects-----	-	-	-	4	4	4	22	26	-	6	6
Haulage-----	1	-	1	90	91	92	144	236	4,500	37	150
Explosions of gas or dust-----	-	-	-	-	-	-	1	1	-	-	-
Explosives-----	-	-	-	4	4	4	3	7	-	10	10
Electricity-----	-	-	-	31	31	31	31	62	-	16	16
Machinery-----	-	-	4	127	131	131	153	284	4,125	41	166
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	1	1	-	-	-
Miscellaneous causes-----	-	-	-	16	16	16	26	42	-	8	8
Total or average-----	1	1	9	552	562	563	903	1,466	2,497	29	90
Wrist, hand, and fingers:											
Falls of roof or back-----	-	-	10	186	196	196	268	464	210	26	35
Falls of face or rib-----	-	-	1	30	31	31	38	69	100	24	26
Pressure bumps or bursts-----	-	-	-	-	-	-	2	2	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	6	59	65	65	127	192	200	15	32
Slips or falls of persons-----	-	-	1	55	56	56	148	204	75	23	24
Handling material-----	-	-	44	657	701	701	1,414	2,115	192	16	27
Handtools-----	-	-	5	248	253	253	915	1,168	243	13	17
Stepping or kneeling on sharp or loose objects-----	-	-	-	4	4	4	8	12	-	7	7
Striking or bumping against objects-----	-	-	-	8	8	8	36	44	-	22	22
Haulage-----	-	-	35	236	271	271	386	657	341	30	70
Explosions of gas or dust-----	-	-	-	-	-	-	2	2	-	-	-
Explosives-----	-	-	-	4	4	4	4	8	-	6	6
Electricity-----	-	-	1	112	113	113	179	292	300	15	17
Machinery-----	-	-	60	435	495	495	588	1,083	209	25	47
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	2	2	2	3	5	-	15	15
Miscellaneous causes-----	-	-	2	35	37	37	111	148	180	10	19
Total or average-----	-	-	165	2,071	2,236	2,236	4,229	6,465	232	20	36
Leg (above ankle):											
Falls of roof or back-----	-	-	-	112	112	112	94	206	-	57	57
Falls of face or rib-----	-	-	-	91	91	91	54	145	-	52	52
Pressure bumps or bursts-----	-	-	-	1	1	1	-	1	-	9	9
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	1	-	47	48	48	53	101	-	29	153
Slips or falls of persons-----	-	-	-	239	239	239	339	578	-	31	31
Handling material-----	-	-	-	195	195	195	281	476	-	18	18
Handtools-----	-	-	-	60	60	60	184	244	-	23	23
Stepping or kneeling on sharp or loose objects-----	-	-	-	98	98	98	88	186	-	26	26
Striking or bumping against objects-----	-	-	-	27	27	27	65	92	-	22	22
Haulage-----	1	-	5	266	271	272	247	519	3,600	47	134
Explosions of gas or dust-----	-	-	-	1	1	1	1	2	-	3	3
Explosives-----	-	-	-	11	11	11	6	17	-	73	73
Electricity-----	-	-	-	11	11	11	5	16	-	26	26
Machinery-----	-	-	2	252	254	254	232	486	3,000	39	62
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	2	2	-	-	-
Miscellaneous causes-----	-	-	1	71	72	72	62	134	3,000	35	76
Total or average-----	1	1	8	1,482	1,491	1,492	1,713	3,205	3,375	36	62

TABLE 20. - Number of injuries and average severity by degree at bituminous coal mines in the United States, by part of body and principal cause of injury, 1972 - Continued

Part of body and principal cause of injury	Number of injuries								Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total	All nonfatal disabling						
		Total	Partial								
Ankle, foot, and toes:											
Falls of roof or back-----	-	-	-	163	163	163	119	282	-	34	34
Falls of face or rib-----	-	-	-	69	69	69	63	132	-	43	43
Pressure bumps or bursts-----	-	-	-	2	2	2	-	2	-	4	4
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	2	74	76	76	81	157	93	23	25
Slips or falls of persons-----	-	-	-	184	184	184	134	318	-	26	26
Handling material-----	-	-	-	296	296	296	318	614	-	24	24
Handtools-----	-	-	-	33	33	33	51	84	-	22	22
Stepping or kneeling on sharp or loose objects-----	-	-	-	142	142	142	283	425	-	13	13
Striking or bumping against objects-----	-	-	-	3	3	3	8	11	-	8	8
Haulage-----	-	-	2	241	243	243	150	393	218	49	51
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	1	1	1	1	2	-	3	3
Electricity-----	-	-	-	1	1	1	1	2	-	56	56
Machinery-----	-	-	4	247	251	251	185	436	525	26	34
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	1	1	1	-	1	-	18	18
Miscellaneous causes-----	-	-	-	46	46	46	56	102	-	15	15
Total or average-----	-	-	8	1,503	1,511	1,511	1,450	2,961	340	29	31
Multiple:											
Falls of roof or back-----	17	-	3	189	192	209	161	370	1,530	57	562
Falls of face or rib-----	2	-	-	69	69	71	57	128	-	53	221
Pressure bumps or bursts-----	-	-	-	1	1	1	-	1	-	9	9
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	1	-	-	31	31	32	27	59	-	33	220
Slips or falls of persons-----	-	-	-	107	107	107	98	205	-	41	41
Handling material-----	2	-	-	61	61	63	62	125	-	31	220
Handtools-----	-	-	-	8	8	8	12	20	-	15	15
Stepping or kneeling on sharp or loose objects-----	-	-	-	7	7	7	8	15	-	33	33
Striking or bumping against objects-----	-	-	-	11	11	11	18	29	-	22	22
Haulage-----	26	1	-	196	197	223	145	368	-	49	770
Explosions of gas or dust-----	5	-	-	14	14	19	7	26	-	95	1,649
Explosives-----	2	-	2	16	18	20	9	29	1,200	23	739
Electricity-----	1	-	-	85	85	86	38	124	-	33	103
Machinery-----	11	-	2	129	131	142	78	220	3,750	37	551
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	3	3	3	1	4	-	31	31
Miscellaneous causes-----	-	-	-	27	27	27	28	55	-	25	25
Total or average-----	67	1	7	954	962	1,029	749	1,778	2,070	44	452
Unclassified (no data):											
Falls of roof or back-----	9	-	-	11	11	20	9	29	-	73	2,740
Falls of face or rib-----	-	-	-	3	3	3	3	6	-	32	32
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	1	-	-	-	-	1	-	1	-	-	6,000
Sliding or falling material or objects-----	-	-	-	3	3	3	3	6	-	29	29
Slips or falls of persons-----	-	-	-	7	7	7	10	17	-	11	11
Handling material-----	1	-	-	12	12	13	16	29	-	21	481
Handtools-----	-	-	-	5	5	5	11	16	-	13	13
Stepping or kneeling on sharp or loose objects-----	-	-	-	2	2	2	2	4	-	6	6
Striking or bumping against objects-----	-	-	-	3	3	3	-	3	-	12	12
Haulage-----	2	-	-	28	28	30	15	45	-	31	429
Explosions of gas or dust-----	-	-	-	5	5	5	-	5	-	13	13
Explosives-----	1	-	-	1	1	2	-	2	-	52	3,026
Electricity-----	5	-	-	26	26	31	21	52	-	13	979
Machinery-----	2	-	-	8	8	10	14	24	-	22	1,217
Suffocation (no flame or smoldering)	1	-	-	4	4	5	4	9	-	3	1,202
Fires or suffocation from fires-----	9	-	-	5	5	14	24	38	-	7	3,860
Miscellaneous causes-----	-	-	-	14	14	14	16	30	-	23	23
Total or average-----	31	-	-	137	137	168	148	316	-	24	1,127
Grand total or average-----	153	7	201	11,804	12,012	12,165	15,700	27,865	549	29	116

TABLE 21. Number of injuries and average severity by degree at Pennsylvania anthracite mines,
by part of body and principal cause of injury, 1972

Part of body and principal cause of injury	Number of injuries								Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total	All nonfatal disabling						
		Total	Partial								
Head, face, neck (excl. eye):											
Falls of roof or back-----	-	-	-	-	-	-	-	-	-	-	-
Falls of face or rib-----	-	-	-	2	2	2	-	2	-	7	7
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	4	4	4	4	8	-	51	51
Slips or falls of persons-----	-	-	-	1	1	1	7	8	-	22	22
Handling material-----	-	-	-	6	6	6	4	10	-	10	10
Handtools-----	-	1	-	3	4	4	6	10	-	20	1,515
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	-
Striking or bumping against objects-----	-	-	-	-	-	-	5	5	-	-	-
Haulage-----	-	-	-	3	3	3	2	5	-	116	116
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	-	-	-	-	-	-	-	-
Electricity-----	-	-	-	-	-	-	1	1	-	-	-
Machinery-----	-	-	-	2	2	2	3	5	-	10	10
Suffocation (no flame or smoldering)-----	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	1	1	1	3	4	-	14	14
Total or average-----	-	1	-	22	23	23	35	58	-	34	293
Eyes:											
Falls of roof or back-----	-	-	-	-	-	-	1	1	-	-	-
Falls of face or rib-----	-	-	-	-	-	-	-	-	-	-	-
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	1	1	1	4	5	-	3	3
Slips or falls of persons-----	-	-	-	-	-	-	-	-	-	-	-
Handling material-----	-	-	-	6	6	6	22	28	-	2	2
Handtools-----	-	-	-	2	2	2	7	9	-	2	2
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	-
Striking or bumping against objects-----	-	-	-	1	1	1	-	1	-	5	5
Haulage-----	-	-	-	-	-	-	-	-	-	-	-
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	-	-	-	-	-	-	-	-
Electricity-----	-	-	-	-	-	-	-	-	-	-	-
Machinery-----	-	-	-	4	4	4	6	10	-	5	5
Suffocation (no flame or smoldering)-----	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	17	17	17	27	44	-	12	12
Total or average-----	-	-	-	31	31	31	67	98	-	8	8
Trunk:											
Falls of roof or back-----	-	-	-	-	-	-	-	-	-	-	-
Falls of face or rib-----	-	-	-	1	1	1	-	1	-	24	24
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	2	2	2	2	4	-	31	31
Slips or falls of persons-----	-	-	-	20	20	20	22	42	-	30	30
Handling material-----	-	-	-	46	46	46	31	77	-	53	53
Handtools-----	-	-	-	8	8	8	8	16	-	29	29
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	1	1	-	-	-
Striking or bumping against objects-----	-	-	-	-	-	-	1	1	-	-	-
Haulage-----	1	-	-	16	16	17	5	22	-	27	378
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	-	-	-	-	-	-	-	-
Electricity-----	-	-	-	-	-	-	-	-	-	-	-
Machinery-----	-	-	-	4	4	4	3	7	-	111	111
Suffocation (no flame or smoldering)-----	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	3	3	3	6	9	-	42	42
Total or average-----	1	-	-	100	100	101	79	180	-	44	103

TABLE 21. - Number of injuries and average severity by degree at Pennsylvania anthracite mines,
by part of body and principal cause of injury, 1972 - Continued

Part of body and principal cause of injury	Number of injuries							Average severity			
	Fatal	Nonfatal disabling			All disabling injuries	Non- disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries	
		Permanent		Tem- porary total							All nonfatal disabling
		Total	Partial								
Arm (above wrist):											
Falls of roof or back-----	-	-	-	-	-	-	-	-	-	-	
Falls of face or rib-----	-	-	-	1	1	1	-	1	-	28	
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	
Sliding or falling material or objects-----	-	-	-	1	1	1	1	2	-	6	
Slips or falls of persons-----	-	-	-	2	2	2	4	6	-	4	
Handling material-----	-	-	-	6	6	6	6	12	-	36	
Handtools-----	-	-	-	-	-	-	3	3	-	-	
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	
Striking or bumping against objects-	-	-	-	-	-	-	1	1	-	-	
Haulage-----	-	-	-	1	1	1	3	4	-	79	
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	
Explosives-----	-	-	-	-	-	-	-	-	-	-	
Electricity-----	-	-	-	-	-	-	1	1	-	-	
Machinery-----	-	-	-	3	3	3	2	5	-	41	
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	
Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	
Miscellaneous causes-----	-	-	-	1	1	1	4	5	-	12	
Total or average-----	-	-	-	15	15	15	25	40	-	31	
Wrist, hand, and fingers:											
Falls of roof or back-----	-	-	-	1	1	1	-	1	-	3	
Falls of face or rib-----	-	-	-	-	-	-	-	-	-	-	
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	
Sliding or falling material or objects-----	-	-	-	1	1	1	5	6	-	1	
Slips or falls of persons-----	-	-	-	7	7	7	7	14	-	24	
Handling material-----	-	-	2	15	17	17	32	49	238	50	
Handtools-----	-	-	-	12	12	12	22	34	-	6	
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	
Striking or bumping against objects-	-	-	-	-	-	-	1	1	-	-	
Haulage-----	-	-	-	1	1	1	6	7	-	41	
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	
Explosives-----	-	-	-	-	-	-	-	-	-	-	
Electricity-----	-	-	-	-	-	-	-	-	-	-	
Machinery-----	-	-	-	-	-	-	2	2	-	-	
Suffocation (no flame or smoldering)	-	-	-	-	-	-	12	12	-	-	
Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	
Miscellaneous causes-----	-	-	-	2	2	2	9	11	-	14	
Total or average-----	-	-	2	39	41	41	96	137	238	29	
Leg (above ankle):											
Falls of roof or back-----	-	-	-	-	-	-	-	-	-	-	
Falls of face or rib-----	-	-	-	2	2	2	-	2	-	36	
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	
Sliding or falling material or objects-----	-	-	-	2	2	2	4	6	-	33	
Slips or falls of persons-----	-	-	-	9	9	9	15	24	-	26	
Handling materials-----	-	-	-	6	6	6	7	13	-	13	
Handtools-----	-	-	-	-	-	-	5	5	-	-	
Stepping or kneeling on sharp or loose objects-----	-	-	-	1	1	1	-	1	-	156	
Striking or bumping against objects-	-	-	-	1	1	1	3	4	-	6	
Haulage-----	-	-	-	9	9	9	4	13	-	29	
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	
Explosives-----	-	-	-	-	-	-	-	-	-	-	
Electricity-----	-	-	-	-	-	-	-	-	-	-	
Machinery-----	-	-	-	4	4	4	1	5	-	49	
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	
Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	
Miscellaneous causes-----	-	-	-	2	2	2	4	6	-	25	
Total or average-----	-	-	-	36	36	36	43	79	-	31	

TABLE 21. - Number of injuries and average severity by degree at Pennsylvania anthracite mines,
by part of body and principal cause of injury, 1972 - Continued

Part of body and principal cause of injury	Number of injuries								Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non- disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total	All nonfatal disabling						
		Total	Partial								
Ankle, foot, and toes:											
Falls of roof or back-----	-	-	-	1	1	1	-	1	-	67	67
Falls of face or rib-----	-	-	-	-	-	-	-	-	-	-	-
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	8	8	8	3	11	-	90	90
Slips or falls of persons-----	-	-	-	12	12	12	4	16	-	24	24
Handling material-----	-	-	-	3	3	3	6	9	-	78	78
Handtools-----	-	-	-	1	1	1	5	6	-	5	5
Stepping or kneeling on sharp or loose objects-----	-	-	-	7	7	7	3	10	-	15	15
Striking or bumping against objects-----	-	-	-	-	-	-	1	1	-	-	-
Haulage-----	-	-	-	6	6	6	3	9	-	40	40
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	-	-	-	-	-	-	-	-
Electricity-----	-	-	-	-	-	-	-	-	-	-	-
Machinery-----	-	-	-	2	2	2	-	2	-	23	23
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	2	2	2	1	3	-	31	31
Total or average-----	-	-	-	42	42	42	26	68	-	42	42
Multiple:											
Falls of roof or back-----	-	-	-	1	1	1	-	1	-	50	50
Falls of face or rib-----	-	-	-	2	2	2	-	2	-	132	132
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	-	-	-	-	-	-	-	-
Slips or falls of persons-----	-	-	-	7	7	7	8	15	-	32	32
Handling material-----	-	-	-	3	3	3	4	7	-	2	2
Handtools-----	-	-	-	1	1	1	-	1	-	6	6
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	-
Striking or bumping against objects-----	-	-	-	-	-	-	-	-	-	-	-
Haulage-----	-	-	-	7	7	7	3	10	-	34	34
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	-	-	-	-	-	-	-	-
Electricity-----	-	-	-	-	-	-	-	-	-	-	-
Machinery-----	-	-	-	2	2	2	1	3	-	7	7
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	1	-	-	-	-	1	-	1	-	-	6,000
Miscellaneous causes-----	-	-	-	2	2	2	2	4	-	20	20
Total or average-----	1	-	-	25	25	26	18	44	-	34	263
Unclassified (no data):											
Falls of roof or back-----	-	-	-	-	-	-	-	-	-	-	-
Falls of face or rib-----	1	-	-	-	-	1	-	1	-	-	6,000
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	-	-	-	-	-	-	-	-
Slips or falls of persons-----	-	-	-	-	-	-	-	-	-	-	-
Handling material-----	-	-	-	3	3	3	1	4	-	22	22
Handtools-----	-	-	-	-	-	-	-	-	-	-	-
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	-
Striking or bumping against objects-----	-	-	-	-	-	-	-	-	-	-	-
Haulage-----	-	-	-	-	-	-	-	-	-	-	-
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	-	-	-	-	-	-	-	-
Electricity-----	-	-	-	-	-	-	-	-	-	-	-
Machinery-----	-	-	-	1	1	1	-	1	-	38	38
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	-	-	-	-	-	-	-	-
Total or average-----	1	-	-	4	4	5	1	6	-	26	1,221
Grand total or average-----	3	1	2	314	317	320	390	710	238	33	109

TABLE 22. - Number of injuries and average severity by degree at all coal mines in the United States, by part of body and principal cause of injury, 1972

Part of body and principal cause of injury	Number of injuries								Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total	All nonfatal disabling						
		Total	Partial								
Head, face, neck (excl. eye):											
Falls of roof or back-----	10	-	-	119	119	129	186	315	-	23	486
Falls of face or rib-----	1	-	-	13	13	14	32	46	-	17	445
Pressure bumps or bursts-----	-	-	-	1	1	1	3	4	-	1	1
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	37	37	37	96	133	-	18	18
Slips or falls of persons-----	-	-	-	32	32	32	65	97	-	18	18
Handling material-----	-	-	-	105	105	105	249	354	-	22	22
Handtools-----	-	1	-	79	80	80	306	386	-	15	89
Stepping or kneeling on sharp or loose objects-----	-	-	-	1	1	1	1	2	-	1	1
Striking or bumping against objects-----	-	-	-	52	52	52	96	148	-	14	14
Haulage-----	6	-	-	206	206	212	260	472	-	33	201
Explosions of gas or dust-----	-	-	-	1	1	1	1	2	-	5	5
Explosives-----	-	-	-	11	11	11	13	24	-	23	23
Electricity-----	-	-	-	24	24	24	32	56	-	9	9
Machinery-----	6	1	-	138	139	145	207	352	-	20	309
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	2	2	2	3	5	-	2	2
Miscellaneous causes-----	-	-	-	24	24	24	118	142	-	11	11
Total or average-----	23	2	-	845	847	870	1,668	2,538	-	22	194
Eye:											
Falls of roof or back-----	-	-	1	27	28	28	61	89	1,800	7	71
Falls of face or rib-----	-	-	-	7	7	7	12	19	-	3	3
Pressure bumps or bursts-----	-	-	-	1	1	1	3	4	-	1	1
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	11	11	11	54	65	-	4	4
Slips or falls of persons-----	-	-	-	2	2	2	2	4	-	3	3
Handling material-----	-	-	-	132	132	132	352	484	-	12	12
Handtools-----	-	-	1	107	108	108	243	351	1,800	16	33
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	-
Striking or bumping against objects-----	-	-	-	9	9	9	8	17	-	3	3
Haulage-----	-	-	-	36	36	36	111	147	-	7	7
Explosions of gas or dust-----	-	-	-	-	-	-	1	1	-	-	-
Explosives-----	-	-	-	3	3	3	6	9	-	10	10
Electricity-----	-	-	-	97	97	97	207	304	-	4	4
Machinery-----	-	-	-	126	126	126	292	418	-	5	5
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	1	1	1	-	1	-	9	9
Miscellaneous causes-----	-	-	1	177	178	178	589	767	1,800	8	18
Total or average-----	-	-	3	736	739	739	1,941	2,680	1,800	9	16
Trunk:											
Falls of roof or back-----	7	2	-	266	268	275	190	465	-	44	239
Falls of face or rib-----	4	-	-	95	95	99	87	186	-	39	280
Pressure bumps or bursts-----	-	-	-	1	1	1	-	1	-	3	3
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	1	-	-	32	32	33	65	98	-	19	200
Slips or falls of persons-----	-	-	-	468	468	468	469	937	-	33	33
Handling material-----	-	-	-	1,547	1,547	1,547	1,239	2,786	-	30	30
Handtools-----	-	-	-	158	158	158	152	310	-	19	19
Stepping or kneeling on sharp or loose objects-----	-	-	-	22	22	22	30	52	-	24	24
Striking or bumping against objects-----	-	-	-	29	29	29	26	55	-	14	14
Haulage-----	13	1	-	539	540	553	412	965	-	39	190
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	8	8	8	8	16	-	26	26
Electricity-----	-	-	-	5	5	5	10	15	-	13	13
Machinery-----	6	-	1	377	378	384	305	689	50	37	130
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	2	2	2	3	5	-	9	9
Miscellaneous causes-----	-	-	-	128	128	128	84	212	-	31	31
Total or average-----	31	3	1	3,677	3,681	3,712	3,080	6,792	50	33	88

TABLE 22. - Number of injuries and average severity by degree at all coal mines in the United States, by part of body and principal cause of injury, 1972 - Continued

Part of body and principal cause of injury	Number of injuries								Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total	All nonfatal disabling						
		Total	Partial								
Arm (above wrist):											
Falls of roof or back-----	-	-	-	84	84	84	83	167	-	32	32
Falls of face or rib-----	-	-	2	17	19	19	13	32	425	40	81
Pressure bumps or bursts-----	-	-	-	1	1	1	-	1	-	3	3
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	11	11	11	33	44	-	17	17
Slips or falls of persons-----	-	1	-	51	52	52	85	137	-	32	147
Handling material-----	-	-	2	88	90	90	198	288	313	16	23
Handtools-----	-	-	-	38	38	38	121	159	-	15	15
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	3	3	-	-	-
Striking or bumping against objects-----	-	-	-	4	4	4	23	27	-	6	6
Haulage-----	1	-	1	91	92	93	147	240	4,500	38	150
Explosions of gas or dust-----	-	-	-	-	-	-	1	1	-	-	-
Explosives-----	-	-	-	4	4	4	3	7	-	10	10
Electricity-----	-	-	-	31	31	31	32	63	-	16	16
Machinery-----	-	-	4	130	134	134	155	289	4,125	41	163
Suffocation (no flame or smoldering)-----	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	1	1	-	-	-
Miscellaneous causes-----	-	-	-	17	17	17	30	47	-	8	8
Total or average-----	1	1	9	567	577	578	928	1,506	2,497	29	89
Wrist, hand, and fingers:											
Falls of roof or back-----	-	-	10	187	197	197	268	465	210	26	35
Falls of face or rib-----	-	-	1	30	31	31	38	69	100	24	26
Pressure bumps or bursts-----	-	-	-	-	-	-	2	2	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	6	60	66	66	132	198	200	15	31
Slips or falls of persons-----	-	-	1	62	63	63	155	218	75	23	24
Handling material-----	-	-	46	672	718	718	1,446	2,164	194	16	28
Handtools-----	-	-	5	260	265	265	937	1,202	243	12	17
Stepping or kneeling on sharp or loose objects-----	-	-	-	4	4	4	8	12	-	7	7
Striking or bumping against objects-----	-	-	-	8	8	8	37	45	-	22	22
Haulage-----	-	-	35	237	272	272	392	664	341	30	70
Explosions of gas or dust-----	-	-	-	-	-	-	2	2	-	-	-
Explosives-----	-	-	-	4	4	4	4	8	-	6	6
Electricity-----	-	-	1	112	113	113	181	294	300	15	17
Machinery-----	-	-	60	435	495	495	600	1,095	209	25	47
Suffocation (no flame or smoldering)-----	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	2	2	2	3	5	-	15	15
Miscellaneous causes-----	-	-	2	37	39	39	120	159	180	10	19
Total or average-----	-	-	167	2,110	2,277	2,277	4,325	6,602	232	20	36
Leg (above ankle):											
Falls of roof or back-----	-	-	-	112	112	112	94	206	-	57	57
Falls of face or rib-----	-	-	-	93	93	93	54	147	-	51	51
Pressure bumps or bursts-----	-	-	-	1	1	1	-	1	-	9	9
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	1	-	49	50	50	57	107	-	29	148
Slips or falls of persons-----	-	-	-	248	248	248	354	602	-	31	31
Handling material-----	-	-	-	201	201	201	288	489	-	18	18
Handtools-----	-	-	-	60	60	60	189	249	-	23	23
Stepping or kneeling on sharp or loose objects-----	-	-	-	99	99	99	88	187	-	28	28
Striking or bumping against objects-----	-	-	-	28	28	28	68	96	-	21	21
Haulage-----	1	-	5	275	280	281	251	532	3,600	46	130
Explosions of gas or dust-----	-	-	-	1	1	1	1	2	-	3	3
Explosives-----	-	-	-	11	11	11	6	17	-	73	73
Electricity-----	-	-	-	11	11	11	5	16	-	26	26
Machinery-----	-	-	2	256	258	258	233	491	3,000	39	62
Suffocation (no flame or smoldering)-----	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	2	2	-	-	-
Miscellaneous causes-----	-	-	1	73	74	74	66	140	3,000	34	75
Total or average-----	1	1	8	1,518	1,527	1,528	1,756	3,284	3,375	36	61

TABLE 22. - Number of injuries and average severity by degree at all coal mines in the United States, by part of body and principal cause of injury, 1972 - Continued

Part of body and principal cause of injury	Number of injuries								Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total	All nonfatal disabling						
		Total	Partial								
Ankle, foot, and toes:											
Falls of roof or back-----	-	-	-	164	164	164	119	283	-	35	35
Falls of face or rib-----	-	-	-	69	69	69	63	132	-	43	43
Pressure bumps or bursts-----	-	-	-	2	2	2	-	2	-	4	4
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	2	82	84	84	84	168	93	30	31
Slips or falls of persons-----	-	-	-	196	196	196	138	334	-	25	25
Handling material-----	-	-	-	299	299	299	324	623	-	24	24
Handtools-----	-	-	-	34	34	34	56	90	-	22	22
Stepping or kneeling on sharp or loose objects-----	-	-	-	149	149	149	286	435	-	13	13
Striking or bumping against objects-----	-	-	-	3	3	3	9	12	-	8	8
Haulage-----	-	-	2	247	249	249	153	402	218	49	51
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	1	1	1	1	2	-	3	3
Electricity-----	-	-	-	1	1	1	1	2	-	56	56
Machinery-----	-	-	4	249	253	253	185	438	525	26	34
Suffocation (no flame or smoldering)-----	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	1	1	1	-	1	-	18	18
Miscellaneous causes-----	-	-	-	48	48	48	57	105	-	15	15
Total or average-----	-	-	8	1,545	1,553	1,553	1,476	3,029	340	30	31
Multiple:											
Falls of roof or back-----	17	-	3	190	193	210	161	371	1,530	57	559
Falls of face or rib-----	2	-	-	71	71	73	57	130	-	56	218
Pressure bumps or bursts-----	-	-	-	1	1	1	-	1	-	9	9
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	1	-	-	31	31	32	27	59	-	33	220
Slips or falls of persons-----	-	-	-	114	114	114	106	220	-	41	41
Handling material-----	2	-	-	64	64	66	66	132	-	29	210
Handtools-----	-	-	-	9	9	9	12	21	-	14	14
Stepping or kneeling on sharp or loose objects-----	-	-	-	7	7	7	8	15	-	33	33
Striking or bumping against objects-----	-	-	-	11	11	11	18	29	-	22	22
Haulage-----	26	1	-	203	204	230	148	378	-	49	747
Explosions of gas or dust-----	5	-	-	14	14	19	7	26	-	95	1,649
Explosives-----	2	-	2	16	18	20	9	29	1,200	23	739
Electricity-----	1	-	-	85	85	86	38	124	-	33	103
Machinery-----	11	-	2	131	133	144	79	223	3,750	37	544
Suffocation (no flame or smoldering)-----	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	1	-	-	3	3	4	1	5	-	31	1,523
Miscellaneous causes-----	-	-	-	29	29	29	30	59	-	25	25
Total or average-----	68	1	7	979	987	1,055	767	1,822	2,070	44	447
Unclassified (no data):											
Falls of roof or back-----	9	-	-	11	11	20	9	29	-	73	2,740
Falls of face or rib-----	1	-	-	3	3	4	3	7	-	32	1,524
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	1	-	-	-	-	1	-	1	-	-	6,000
Sliding or falling material or objects-----	-	-	-	3	3	3	3	6	-	29	29
Slips or falls of persons-----	-	-	-	7	7	7	10	17	-	11	11
Handling material-----	1	-	-	15	15	16	17	33	-	21	395
Handtools-----	-	-	-	5	5	5	11	16	-	13	13
Stepping or kneeling on sharp or loose objects-----	-	-	-	2	2	2	2	4	-	6	6
Striking or bumping against objects-----	-	-	-	3	3	3	-	3	-	12	12
Haulage-----	2	-	-	28	28	30	15	45	-	31	429
Explosions of gas or dust-----	-	-	-	5	5	5	-	5	-	13	13
Explosives-----	1	-	-	1	1	2	-	2	-	52	3,026
Electricity-----	5	-	-	26	26	31	21	52	-	13	979
Machinery-----	2	-	-	9	9	11	14	25	-	23	1,110
Suffocation (no flame or smoldering)-----	1	-	-	4	4	5	4	9	-	3	1,202
Fires or suffocation from fires-----	9	-	-	5	5	14	24	38	-	7	3,860
Miscellaneous causes-----	-	-	-	14	14	14	16	30	-	23	23
Total or average-----	32	-	-	141	141	173	149	322	-	24	1,129
Grand total or average-----	156	8	203	12,118	12,329	12,485	16,090	28,575	546	29	116

TABLE 23. - Number of injuries, injury rates, and average severity at bituminous coal mines.
By nature of injury, 1972

General work location and nature of injury	Number of injuries					Distri- bution of all dis- in- juries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity							
	Fatal	Nonfatal disabling					All in- juries	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Perma- nent partial	Tem- porary total	All dis- abling				
		Permanent	Tem- porary total	All fatal dis- abling	All dis- abling																
																		Par- tial	Total	Fatal	Non- fatal dis- abling
Underground mines:																					
Amputation, enucleation----	1	126	127	127	127	1	1.3	0.75	0.75	0.01	389	426	526	-	569						
Asphyxiation-----	11	-	12	12	23	25	4.2	0.06	.07	.14	389	389	-	7	2,873						
Burn, scald (except chemical)-----	5	-	92	92	97	134	1.0	.03	.54	.57	177	13	190	-	25	333					
Burn, chemical-----	-	-	17	17	61	58	2	-	.10	.10	24	3	3	-	25	333					
Concussion-----	-	-	10	10	10	2	1.1	-	.06	.06	-	2	2	-	42	42					
Crushing, contusion-----	51	12	3,099	3,111	3,162	4,409	32.0	.30	18.33	18.63	1,803	444	2,247	940	21	121					
Cut, laceration-----	2	5	978	983	985	1,684	10.0	.01	5.79	5.80	110	113	183	240	18	32					
Dehydration-----	-	-	2	2	2	6	(2/)	-	.01	.01	-	(1/)	(1/)	-	10	10					
Dislocation-----	-	-	52	52	52	21	5	-	.31	.31	-	15	15	-	50	50					
Electric shock-----	2	5	35	37	37	22	4	.01	.21	.22	71	3	3	-	15	15					
Fracture-----	11	5	1,019	1,025	1,036	1,360	10.5	.06	6.04	6.10	389	614	1,003	3,000	70	338					
Hearing loss-----	-	-	1	1	1	5	(2/)	-	.03	.03	-	(1/)	(1/)	-	2	2					
Hernia-----	-	-	66	66	66	12	78	-	.39	.39	-	21	21	-	54	54					
Inflammation-----	-	-	27	27	27	8	35	.01	.16	.16	35	4	4	-	25	25					
Poisoning-----	1	-	2	2	2	7	10	(2/)	.01	.02	35	1	36	-	52	2,035					
Radiation-----	-	-	129	129	129	195	324	-	.76	.76	-	8	8	-	10	10					
Scrapes-----	-	-	70	70	70	184	254	-	.41	.41	-	5	5	-	11	11					
Strain, sprain-----	-	-	2,166	2,166	2,166	1,904	4,070	-	12.76	12.76	11,222	374	374	-	29	29					
Multiple injuries-----	22	8	572	580	602	562	6.1	.13	3.42	3.55	778	206	984	1,231	44	277					
Other, not classified elsewhere-----	1	-	563	563	564	1,086	1,660	.01	3.32	3.32	35	46	81	-	14	25					
Other, not classified elsewhere-----	15	1	680	681	696	570	1,266	.09	4.01	4.10	530	126	656	75	31	160					
Unclassified (no data)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Total or average-----	121	6	153	9,592	9,751	21,436	21,308	.71	57.45	58.17	4,278	2,424	6,701	599	30	115					
Surface:																					
Amputation, enucleation----	1	-	11	11	12	-	12	.06	.45	.71	356	527	883	-	1,239						
Asphyxiation-----	1	-	3	3	4	-	4	.06	.18	.24	356	1	357	-	1,503						
Burn, scald (except chemical)-----	-	-	10	10	10	50	60	-	.59	.59	-	11	11	-	18	18					
Burn, chemical-----	-	-	5	5	5	9	14	-	.30	.30	-	3	3	-	10	10					
Concussion-----	-	-	5	5	5	1	1.4	-	.06	.06	-	(1/)	(1/)	-	5	5					
Crushing, contusion-----	2	-	100	100	102	303	405	.12	5.94	6.06	713	118	831	-	20	137					
Cut, laceration-----	-	-	45	45	45	214	259	-	2.67	2.67	-	42	42	-	16	16					
Dislocation-----	-	-	2	2	2	3	5	-	.12	.12	-	29	29	-	246	246					
Electric shock-----	1	-	74	75	75	39	114	.06	4.45	4.45	356	628	628	-	62	6,000					
Fracture-----	-	-	5	5	5	6	11	-	.30	.30	-	15	15	-	52	52					
Hearing loss-----	-	-	5	5	5	1	1	-	.30	.30	-	15	15	-	52	52					
Inflammation-----	-	-	27	27	27	8	35	-	.16	.16	-	4	4	-	25	25					
Poisoning-----	-	-	129	129	129	18	28	-	.76	.76	-	8	8	-	10	10					
Radiation-----	-	-	70	70	70	22	22	-	.41	.41	-	5	5	-	11	11					
Scrapes-----	-	-	2,166	2,166	2,166	1,666	335	-	10.13	10.13	356	65	421	-	27	27					
Strain, sprain-----	-	-	40	40	41	61	82	.06	2.38	2.43	-	26	26	-	12	12					
Multiple injuries-----	1	-	37	37	37	144	181	-	2.20	2.20	-	73	73	-	41	41					
Other, not elsewhere classified-----	-	-	30	30	30	43	73	-	1.78	1.78	-	26	26	-	12	12					
Unclassified (no data)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Total or average-----	6	1	11	535	547	1,058	1,611	.36	32.48	32.84	2,138	1,785	3,922	806	28	119					
Total or average, underground mines-----	127	7	164	10,127	10,298	12,494	22,919	.68	55.20	55.88	4,084	2,366	6,450	613	30	115					

See footnotes at end of table.

TABLE 23. - Number of injuries, injury rates, and average severity at bituminous coal mines, by nature of injury, 1972 - Continued

General work location and nature of injury	Number of injuries						Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity			
	Fatal	Nonfatal disabling						All disabling injuries	Fatal	Non-fatal disabling	All disabling	Non-fatal disabling	Fatal	Non-fatal disabling	All disabling	Permanent partial	Temporary total	All disabling
		Permanent		All non-fatal disabling	All disabling injuries	All disabling												
		Partial	Total															
Strip mines:	-	21	-	21	21	-	1.8	0.42	-	-	-	144	144	341	-	-	341	
Amputation, enucleation-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Asphyxiation-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Burn, scald (except chemical)-----	-	-	46	46	46	90	3.8	.92	1.80	-	-	11	11	-	12	12	12	
Burn, chemical-----	-	-	11	11	11	19	.9	.22	.22	-	-	1	1	-	6	6	6	
Concussion-----	-	-	3	3	3	6	16.8	3.91	4.03	8.58	722	60	781	88	20	20	20	
Crushing, contusion-----	6	2	193	195	201	428	7.7	1.84	1.84	8.26	-	26	26	200	12	14	14	
Cut, laceration-----	-	-	1	91	92	412	.1	.02	.02	.08	-	(1/)	(1/)	-	13	13	13	
Dermatitis-----	-	-	1	1	1	4	.1	-	-	-	-	-	-	-	31	31	31	
Dislocation-----	-	-	17	17	17	11	1.4	.34	.34	.22	-	11	11	-	52	52	2,034	
Electric shock-----	1	-	2	2	3	5	.3	.06	.10	1.20	120	2	122	-	49	49	178	
Fracture-----	3	-	135	135	138	60	11.5	2.71	2.77	1.20	361	131	492	-	19	19	19	
Heat exhaustion-----	-	-	1	1	1	-	.1	.02	.02	-	-	16	16	-	10	10	10	
Hernia-----	-	-	1	15	16	16	1.3	.32	.32	.14	-	1	1	50	49	49	49	
Inflammation-----	-	-	4	4	4	3	.3	.08	.08	.06	-	-	-	-	4	4	4	
Poisoning-----	-	-	4	4	4	9	.3	.08	.08	.18	-	(1/)	(1/)	-	4	4	4	
Radiation-----	-	-	13	13	13	23	1.1	.26	.26	.46	-	8	8	-	30	30	30	
Scratches-----	-	-	13	13	13	32	1.1	.26	.26	.64	-	2	2	-	9	9	9	
Strain, sprain-----	-	-	320	320	320	660	26.8	6.41	6.41	6.41	-	139	139	-	22	22	22	
Multiple injuries-----	3	-	88	90	93	105	7.8	1.80	1.86	2.10	361	53	414	100	28	22	22	
Other, not elsewhere classified-----	1	-	101	101	102	417	8.5	.02	2.02	8.36	120	47	167	-	23	23	82	
Unclassified (no data)-----	4	-	93	93	97	187	8.1	1.86	1.94	3.75	481	70	551	-	37	37	283	
Total or average-----	18	-	27	1,151	1,178	2,133	-	23.61	23.97	42.75	2,165	723	2,888	288	25	120	120	
Auger mines:																		
Amputation, enucleation-----	-	-	2	2	2	2	4.0	1.03	1.03	-	-	193	193	188	-	-	188	
Asphyxiation-----	-	-	-	-	-	-	18.0	4.63	4.63	5.66	-	104	104	-	22	22	22	
Crushing, contusion-----	-	-	9	9	9	11	10.0	2.57	2.57	6.17	-	10	10	-	4	4	4	
Cut, laceration-----	-	-	5	5	5	12	17.0	4.11	4.11	.51	-	226	226	-	55	55	55	
Fracture-----	-	-	8	8	8	1	16.0	4.63	4.63	4.11	-	130	130	-	28	28	28	
Strain, sprain-----	-	-	9	9	9	8	18.0	4.63	4.11	-	-	1	1	-	1	1	1	
Multiple injuries-----	-	-	1	1	1	-	2.0	.51	.51	-	-	-	-	-	3	3	3	
Other, not elsewhere classified-----	-	-	7	7	7	5	14.0	3.60	3.60	2.57	-	9	9	-	1	1	1	
Unclassified (no data)-----	1	-	8	8	9	3	18.0	4.11	4.63	1.54	3,085	75	3,159	-	18	18	683	
Total or average-----	1	-	2	47	49	50	-	25.19	25.70	20.56	3,085	746	3,831	188	23	149	149	
Total or average, surface mining-----	19	-	29	1,198	1,227	2,173	-	23.67	24.03	41.91	2,199	724	2,923	281	25	122	122	
Total or average, mining-----	146	7	193	11,325	11,671	14,667	-	48.34	48.95	61.52	3,674	2,009	5,683	563	29	116	116	

See footnotes at end of table.

TABLE 23. - Number of injuries, injury rates, and average severity at bituminous coal mines, by nature of injury, 1972 - Continued

General work location and nature of injury	Number of injuries						Distri- bution of all dis- abling in- juries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity				
	Fatal	Nonfatal disabling				Non- dis- abling in- juries		Fatal	Non- fatal dis- abling	All fatal dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Perma- nent partial	Tem- porary total	All dis- abling		
		Total	Par- tial	Tempo- rary total	All non- fatal dis- abling													All dis- abling in- juries	
Independent shops and yards:	-	-	-	-	-	-	1	2.3	-	0.30	0.30	-	-	-	192	192	640	-	640
Amputation, enucleation----	-	-	-	-	-	-	1	4.7	-	.60	.60	-	2.10	-	5	5	-	8	8
Burn, scald (except	-	-	-	-	-	-	7	14.0	-	1.80	1.80	-	10.52	-	12	12	-	7	7
chemical)-----	-	-	-	-	-	-	35	16.3	-	2.10	2.10	-	9.02	-	29	29	-	14	14
Crushing, contusion-----	-	-	-	-	-	-	30	2.3	-	.30	.30	-	.30	-	(1/)	(1/)	-	1	1
Cut, laceration-----	-	-	-	-	-	-	1	2.3	-	.30	.30	-	.30	-	62	62	-	207	207
Dermatitis-----	-	-	-	-	-	-	1	18.6	-	2.41	2.41	-	.30	-	197	197	-	82	82
Electric shock-----	-	-	-	-	-	-	1	-	-	-	-	-	.30	-	-	-	-	-	-
Fracture-----	-	-	-	-	-	-	1	-	-	-	-	-	.90	-	-	-	-	-	-
Poisoning-----	-	-	-	-	-	-	3	20.9	-	2.71	2.71	-	4.51	-	48	48	-	18	18
Scraping-----	-	-	-	-	-	-	9	10	-	.60	.60	-	2.41	-	11	11	-	19	19
Strain, sprain-----	-	-	-	-	-	-	2	7.0	-	.90	.90	-	8.72	-	6	6	-	6	6
Other, not elsewhere	-	-	-	-	-	-	3	7.0	-	.90	.90	-	8.72	-	7	7	-	7	7
classified-----	-	-	-	-	-	-	3	7.0	-	.90	.90	-	8.72	-	7	7	-	7	7
Unclassified (no data)-----	-	-	-	-	-	-	9	12	-	.90	.90	-	8.72	-	7	7	-	7	7
Total or average-----	-	-	-	-	-	-	43	139	-	12.93	12.93	-	41.80	-	569	569	640	30	44
Mechanical cleaning plants:	-	-	-	-	-	-	6	6	1.3	.31	.31	-	.10	-	31	31	103	-	103
Asphyxiation-----	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-
Burn, scald (except	-	-	-	-	-	-	33	42	2.0	.46	.46	-	1.68	-	23	23	-	49	49
chemical)-----	-	-	-	-	-	-	5	7	.4	.10	.10	-	.26	-	(1/)	(1/)	-	2	2
Crushing, contusion-----	-	-	-	-	-	-	1	1	.2	.05	.05	-	.10	-	(1/)	(1/)	-	6	6
Cut, laceration-----	4	-	-	-	-	-	94	339	21.7	0.20	4.79	5.00	12.29	1,224	101	1,326	21	265	265
Dermatitis-----	-	-	-	-	-	-	25	162	5.5	1.28	1.28	-	8.26	-	15	15	-	12	12
Dislocation-----	-	-	-	-	-	-	1	4	.2	.05	.05	-	.20	-	(1/)	(1/)	-	3	3
Electric shock-----	-	-	-	-	-	-	2	2	.4	.10	.10	-	.10	-	3	3	-	26	26
Fracture-----	1	-	-	-	-	-	49	76	10.9	.05	.10	.15	.15	306	2	308	6	211	211
Freezing-----	-	-	-	-	-	-	1	1.2	-	.03	.03	-	.26	-	186	186	-	19	19
Infestation-----	-	-	-	-	-	-	5	13	1.9	.41	.41	-	.26	-	1	1	-	39	39
Poisoning-----	-	-	-	-	-	-	1	1	-	-	-	-	.05	-	-	-	-	-	-
Radiation-----	-	-	-	-	-	-	1	2	.2	.05	.05	-	.05	-	(1/)	(1/)	1	1	1
Scraping-----	-	-	-	-	-	-	8	14	1.8	.41	.41	-	.71	-	13	13	31	31	31
Strain, sprain-----	-	-	-	-	-	-	3	18	.7	.15	.15	-	.92	-	1	1	6	6	6
Multiple injuries-----	2	-	-	-	-	-	137	314	30.4	-	6.99	6.99	9.03	612	171	171	24	24	24
Other, not elsewhere	-	-	-	-	-	-	39	79	8.9	.10	1.94	2.04	1.99	702	90	702	450	35	344
classified-----	-	-	-	-	-	-	35	167	7.8	1.79	1.79	-	6.73	-	16	16	-	9	9
Unclassified (no data)-----	-	-	-	-	-	-	22	55	4.9	1.12	1.12	-	1.68	-	23	23	-	21	21
Total or average-----	7	-	7	437	444	451	894	1,345	-	36	22.65	23.01	45.60	2,142	692	2,834	152	29	123
Grand total or average-----	153	7	201	11,804	12,012	12,165	13,700	27,865	-	.59	45.96	46.35	60.08	3,513	1,892	6,405	549	29	116

1/ Less than 0.5
2/ Less than 0.05

TABLE 24. - Number of injuries, injury rates, and average severity at Pennsylvania anthracite mines, by nature of injury, 1972

General work location and nature of injury	Number of injuries							Distri- bution of all dis- abling in- juries, percent	Frequency rates per million man-hours					Severity rates per million man-hours			Average severity			
	Fatal	Nonfatal disabling				All dis- abling in- juries	Non- dis- abling in- juries		All dis- abling in- juries	Fatal	Non- fatal dis- abling	All dis- abling	Non- fatal dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Perma- nent partial	Tem- porary total	All dis- abling	
		Total	Parti- al	Total	Tempo- rary															All non- fatal
Underground mines:																				
Crushing, contusion----	1	-	31	31	32	18	50	43.8	1.29	40.13	41.43	23.30	579	8,347	-	14	201			
Cut, laceration-----	-	-	11	11	11	19	30	15.1	-	14.24	14.24	24.60	190	190	-	13	11			
Dermatitis-----	-	-	-	-	-	-	1	-	-	-	-	1.29	-	-	-	-	-			
Fracture-----	-	-	3	3	3	-	3	4.1	-	3.88	3.88	-	397	397	-	-	102			
Inflammation-----	-	-	2	2	2	-	2	2.7	-	2.59	2.59	-	183	183	-	-	70			
Scratches-----	-	-	2	2	2	-	2	2.7	-	2.59	2.59	-	19	19	-	-	8			
Strain, sprain-----	-	-	12	12	12	5	17	16.4	-	15.54	15.54	6.47	530	530	-	-	34			
Multiple injuries-----	-	-	4	4	4	-	4	5.5	-	5.18	5.18	-	170	170	-	-	33			
Other, not elsewhere classified-----	-	-	5	5	5	7	12	6.8	-	6.47	6.47	9.06	84	84	-	-	13			
Unclassified (no data)----	-	-	2	2	2	-	2	2.7	-	2.59	2.59	-	50	50	-	-	20			
Total or average-----	1	-	72	72	73	52	125	-	1.29	93.21	94.51	67.32	2,202	9,970	-	24	105			
Surface:																				
Crushing, contusion----	-	-	-	-	-	1	1	20.0	-	4.61	4.61	4.61	-	-	-	-	-			
Cut, laceration-----	-	-	1	1	1	1	2	40.0	-	9.22	9.22	-	5	5	-	-	1			
Fracture-----	-	-	2	2	2	-	2	20.0	-	4.61	4.61	-	203	203	-	-	22			
Inflammation-----	-	-	1	1	1	1	1	20.0	-	4.61	4.61	-	5	5	-	-	1			
Strain, sprain-----	-	-	1	1	1	1	2	20.0	-	4.61	4.61	4.61	5	5	-	-	21			
Other, not elsewhere classified-----	-	-	-	-	-	1	1	-	-	-	-	4.61	-	-	-	-	-			
Total or average-----	-	-	5	5	5	4	9	-	-	23.05	23.05	18.44	-	309	-	-	13			
Total or average, underground mines-----	1	-	77	77	78	56	134	-	1.01	77.83	78.84	56.60	1,787	7,852	-	23	100			
Strip mines:																				
Amputation, enucleation----	-	1	-	1	1	-	1	.8	-	.38	.38	-	28	28	75	-	75			
Burn, scald (except chemical)-----	-	-	1	1	1	2	8	1.6	.38	.38	.76	2.27	7	2,280	-	-	19			
Burn, chemical-----	1	-	1	1	1	2	3	.8	.38	.38	.76	2.27	(1)	2,470	-	1	3,010			
Crushing, contusion----	1	-	21	21	22	36	58	17.1	.38	7.95	8.33	13.64	377	2,470	-	47	318			
Cut, laceration-----	-	-	8	8	8	22	30	6.2	-	3.03	3.03	8.33	73	73	-	24	24			
Dermatitis-----	-	-	-	-	-	2	2	-	-	-	-	.76	-	-	-	-	-			
Dislocation-----	-	-	1	1	1	1	2	.8	-	.38	.38	-	-	-	-	-	-			
Fracture-----	-	-	9	9	9	4	13	7.0	-	3.41	3.41	1.52	13	13	-	35	35			
Hernia-----	-	-	2	2	2	1	3	1.6	-	.76	.76	.38	43	43	-	54	54			
Inflammation-----	-	-	-	-	-	2	2	-	-	-	-	.76	-	-	-	-	56			
Radiation-----	-	-	2	2	2	-	2	1.6	-	.76	.76	-	11	11	-	14	14			
Scratches-----	-	-	-	-	-	3	3	-	-	-	-	-	-	-	-	-	-			
Strain, sprain-----	-	-	41	41	41	20	61	31.8	-	15.53	15.53	7.58	519	519	-	33	33			
Cerebral hemorrhage-----	-	-	1	1	1	1	1	.8	-	.38	.38	-	2,273	2,273	-	-	6,000			
Multiple injuries-----	-	-	9	9	9	6	15	7.0	-	3.41	3.41	2.27	65	65	-	19	19			
Other, not elsewhere classified-----	-	-	16	16	16	29	45	12.4	-	6.06	6.06	10.98	86	86	-	14	14			
Unclassified (no data)----	-	-	14	14	14	3	17	10.9	-	5.30	5.30	1.14	135	135	-	26	26			
Total or average-----	2	1	125	127	129	137	266	-	.76	48.10	48.86	51.89	3,815	8,360	75	32	171			

See footnote at end of table.

TABLE 24. - Number of injuries, injury rates, and average severity at Pennsylvania anthracite mines, by nature of injury, 1972 - Continued

General work location and nature of injury	Number of injuries							Distri- bution of all dis- abling in- juries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity		
	Fatal	Nonfatal disabling					Non- dis- abling in- juries		All dis- abling in- juries	Fatal	Non- fatal dis- abling	All dis- abling	Non- fatal dis- abling	Fatal	Perma- nent partial	Tem- porary total	All dis- abling	
		Total	Per- man- ent	Tem- porary total	All non- fatal dis- abling													
Culm banks:	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	
Burn, chemical-----	-	-	-	-	-	-	3	7	28.6	-	3.31	-	-	-	-	-	-	
Crushing, contusion-----	-	-	-	-	-	-	1	5	28.6	-	13.25	9.94	348	348	26	26	26	
Cut, laceration-----	-	-	-	-	-	-	1	1	28.6	-	13.25	3.31	209	209	16	16	16	
Fracture-----	-	-	-	-	-	-	1	6	28.6	-	13.25	3.31	116	116	9	9	9	
Strain, sprain-----	-	-	-	-	-	-	2	3	14.3	-	6.62	3.31	66	66	10	10	10	
Multiple injuries-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other, not elsewhere classified-----	-	-	-	-	-	-	3	1	-	-	-	-	-	-	-	-	-	
Unclassified (no data)-----	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	
Total or average-----	-	-	-	-	-	-	14	27	-	-	46.37	43.06	739	739	-	16	16	
Dredges:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Burn, scald (except chemical)-----	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	
Crushing, contusion-----	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	
Cut, laceration-----	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	
Fractures-----	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	
Total or average-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total or average, surface mining-----	2	1	1	139	141	143	152	295	-	0.67	47.19	47.86	50.87	4,016	3,446	75	30	156
Total or average, mining-----	3	1	1	216	218	221	208	429	-	.75	54.81	55.57	52.30	4,526	3,033	75	28	136
Independent shops and yards:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Burn, scald (except chemical)-----	-	-	-	-	-	-	1	2	50.0	-	12.83	12.83	-	-	38	-	3	3
Crushing, contusion-----	-	-	-	-	-	-	5	6	50.0	-	12.83	12.83	51	51	4	-	-	
Cut, laceration-----	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	
Electric shock-----	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	
Strain, sprain-----	-	-	-	-	-	-	4	4	-	-	-	-	-	-	-	-	-	
Other, not elsewhere classified-----	-	-	-	-	-	-	4	4	-	-	-	-	-	-	-	-	-	
Unclassified (no data)-----	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	
Total or average-----	-	-	-	-	-	-	2	20	-	-	25.67	25.67	230.99	-	90	-	4	4
Mechanical cleaning plants:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Amputation, emasculation-----	-	-	-	-	-	-	1	1	1.0	-	.46	.46	-	-	185	-	400	
Burn, scald (except chemical)-----	-	-	-	-	-	-	9	11	2.1	-	.93	.93	4.17	15	-	16	16	
Crushing, contusion-----	-	-	-	-	-	-	3	3	1.0	-	-	-	1.39	-	-	-	-	
Cut, laceration-----	-	-	-	-	-	-	1	1	18.6	-	.46	.46	-	2	2	5	5	
Crushing, contusion-----	-	-	-	-	-	-	48	66	15.5	-	8.35	8.35	22.26	316	316	38	38	
Cut, laceration-----	-	-	-	-	-	-	27	42	15.5	-	6.96	6.96	12.52	279	279	40	40	
Permatitis-----	-	-	-	-	-	-	1	2	1.0	-	.46	.46	.46	14	14	31	31	
Fracture-----	-	-	-	-	-	-	10	12	10.3	-	4.64	4.64	.93	427	427	92	92	
Strain, sprain-----	-	-	-	-	-	-	2	4	4.1	-	1.85	1.85	-	173	173	93	93	
Radiation-----	-	-	-	-	-	-	2	2	2.1	-	.93	.93	-	3	3	4	4	
Scratches-----	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	
Strain, sprain-----	-	-	-	-	-	-	29	60	29.9	-	13.65	13.65	14.38	696	696	52	52	
Multiple injuries-----	-	-	-	-	-	-	6	11	6.2	-	2.78	2.78	2.32	58	58	21	21	
Other, not elsewhere classified-----	-	-	-	-	-	-	5	32	5.2	-	2.32	2.32	14.84	8	8	3	3	
Unclassified (no data)-----	-	-	-	-	-	-	3	7	3.1	-	1.39	1.39	1.85	28	28	20	20	
Total or average-----	-	-	-	-	-	-	97	261	-	-	44.98	44.98	76.05	-	2,205	400	49	
Grand total or average-----	3	1	2	314	317	320	390	710	-	.48	51.03	51.52	62.79	2,898	2,709	238	33	109

1/ Less than 0.5

TABLE 25. - Number of injuries at bituminous coal mines in the United States, by part of body injured and nature of injury, 1972

Nature of injury	Part of body									
	Total			Head, face, neck (excluding eye)			Eye		Trunk	
	Fatal	Nonfatal disabling	Non- disabling	Fatal	Nonfatal disabling	Non- disabling	Fatal	Nonfatal disabling	Fatal	Non- disabling
Amputation, enucleation---	1	168	1	-	-	1	-	-	-	-
Asphyxiation-----	12	15	28	-	-	-	-	-	-	-
Burn, scald (except chemical)-----	5	159	318	-	19	55	-	-	-	-
Burn, chemical-----	-	35	74	-	3	8	-	-	-	-
Concussion-----	-	15	2	-	15	2	-	-	-	-
Crushing, contusion-----	63	3,515	5,427	11	157	341	-	-	-	-
Cut, laceration-----	2	1,157	2,714	2	223	619	-	-	-	-
Dermatitis-----	-	5	15	-	-	-	-	-	-	-
Dislocation-----	-	73	35	-	1	2	-	-	-	-
Electric shock-----	5	40	27	-	-	-	-	-	-	-
Fracture-----	14	1,300	472	6	66	55	-	-	-	-
Freezing-----	-	1	-	-	-	-	-	-	-	-
Hearing loss-----	-	1	6	-	1	6	-	-	-	-
Heat exhaustion-----	-	1	-	-	-	-	-	-	-	-
Hernia-----	-	95	30	-	-	-	-	-	-	-
Inflammation-----	-	31	13	-	-	-	-	-	-	-
Poisoning-----	1	7	20	-	-	4	-	-	-	-
Radiation-----	-	160	250	-	8	14	-	-	-	-
Scratches-----	-	88	257	-	7	43	-	-	-	-
Strain, sprain-----	-	2,812	2,588	-	113	140	-	-	-	-
Cerebral hemorrhage-----	-	-	-	-	-	-	-	-	-	-
Multiple injuries-----	28	751	755	1	86	109	-	-	-	-
Other, not elsewhere classified-----	2	746	1,823	1	51	140	-	-	-	-
Unclassified (no data)---	20	837	845	2	74	94	-	-	-	-
Total-----	153	12,012	15,700	23	824	1,633	-	-	30	3,581
							708	1,874	3,001	903

TABLE 25. - Number of injuries at bituminous coal mines in the United States, by part of body injured and nature of injury, 1972 - Continued

Nature of injury	Part of body											
	Wrist, hand, fingers			Leg (above ankle)			Ankle, foot, toes			Multiple parts		
	Fatal	Nonfatal disabling	Nonfatal non-disabling	Fatal	Nonfatal disabling	Nonfatal non-disabling	Fatal	Nonfatal disabling	Nonfatal non-disabling	Fatal	Nonfatal disabling	Nonfatal non-disabling
Amputation, enucleation----	-	145	-	1	6	-	-	6	-	3	-	-
Asphyxiation-----	-	-	-	-	-	-	-	-	-	-	11	27
Burn, scald (except chemical)-----	-	41	114	-	8	15	-	7	28	34	7	1
Burn, chemical-----	-	7	7	-	2	1	-	1	3	1	-	-
Concussion-----	-	-	-	-	-	-	-	-	-	-	-	-
Crushing, contusion-----	-	750	1,611	-	676	923	-	636	795	298	1	28
Cut, laceration-----	-	524	1,362	-	114	225	-	82	196	33	4	6
Dermatitis-----	-	1	1	-	-	-	-	-	-	2	1	-
Dislocation-----	-	8	10	-	10	3	-	2	1	-	-	-
Electric shock-----	-	3	1	-	1	-	-	1	-	12	5	16
Fracture-----	-	340	260	-	188	10	-	304	65	62	3	-
Freezing-----	-	1	-	-	-	-	-	-	-	-	-	-
Hearing loss-----	-	-	-	-	-	-	-	-	-	-	-	-
Heat exhaustion-----	-	-	-	-	-	-	-	-	-	-	1	-
Hernia-----	-	-	-	-	-	-	-	-	-	-	-	-
Inflammation-----	-	1	1	-	24	7	-	2	-	1	-	-
Poisoning-----	-	-	1	-	-	1	-	-	-	1	5	13
Radiation-----	-	15	51	-	-	2	-	-	-	39	2	-
Scratches-----	-	19	61	-	15	40	-	3	3	6	1	1
Strain, sprain-----	-	60	162	-	253	266	-	306	276	71	6	12
Cerebral hemorrhage-----	-	-	-	-	-	-	-	-	-	-	-	-
Multiple injuries-----	-	128	230	-	80	75	-	53	19	284	3	5
Other, not elsewhere classified-----	-	109	212	-	44	52	-	10	14	41	13	3
Unclassified (no data)-----	-	84	145	-	69	92	-	98	62	74	38	36
Total-----	-	2,236	4,229	1	1,491	1,713	-	1,511	1,450	962	137	148

TABLE 27. - Closed cases ^{1/} of temporary total injuries, for which companies reported days of disability, at coal mines, by days of disability per injury and kind of coal, 1972

Days of disability per injury	Number of closed temporary total injuries			Percent of total
	Bituminous coal	Pennsylvania anthracite	Total	
1-----	1,307	29	1,336	11.2
2-----	606	17	623	5.2
3-----	856	18	874	7.3
4-----	775	23	798	6.7
5-----	691	19	710	5.9
6-----	569	16	585	4.9
7-----	303	10	313	2.6
8-----	244	3	247	2.1
9-----	332	7	339	2.8
10-----	269	5	274	2.3
11-----	253	4	257	2.1
12-----	258	6	264	2.2
13-----	293	3	296	2.5
14-----	142	3	145	1.2
15-----	120	3	123	1.0
16-----	148	4	152	1.3
17-----	138	3	141	1.2
18-----	144	4	148	1.2
19-----	154	5	159	1.3
20-----	152	5	157	1.3
21-----	127	4	131	1.1
22-----	48	2	50	.4
23-----	116	3	119	1.0
24-----	212	4	216	1.8
25-----	145	3	148	1.2
26-----	79	1	80	.7
27-----	82	2	84	.7
28-----	62	3	65	.5
29-----	56	2	58	.5
30-----	131	4	135	1.1
31-----	96	3	99	.8
32-----	128	5	133	1.1
33-----	86	3	89	.7
34-----	91	5	96	.8
35-----	48	4	52	.4
36-----	107	2	109	.9
37-----	60	3	63	.5
38-----	112	3	115	1.0
39-----	42	1	43	.4
40-----	73	1	74	.6
41-----	61	2	63	.5
42-----	26	-	26	.2
43-----	29	3	32	.3
44-----	39	1	40	.3
45-----	45	-	45	.4
46-60-----	544	17	561	4.7
61-90-----	509	13	522	4.4
91-120-----	245	9	254	2.1
121-150-----	149	6	155	1.3
151 or more-----	375	9	384	3.2
Total-----	11,677	305	11,982	-----

^{1/} In addition to the closed temporary total injuries, there were 127 temporary total injuries for which days of disability were not reported at bituminous coal mines and 9 at Pennsylvania anthracite mines. To obtain total severity data for the industry, these "open cases" were closed by assigning average days of disability by detailed cause classification.

TABLE 28. - Number of injuries, frequency rates per million man-hours, employment, worktime, and production data at bituminous coal mines in the United States, by general work location and employment size group, 1972

General work location and employment size group	Number of injuries					Frequency rates per million man-hours					Average men working daily	Man-hours worked	Production, short tons	Tons per man-hour	Number of operations
	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries					
Underground mines (includes surface works):															
1 to 4-----	5	16	21	2	23	16.78	53.71	70.69	6.71	77.21	373	297,907	466,972	1.57	133
5 to 9-----	6	48	54	8	62	4.03	32.22	36.25	5.37	41.62	1,811	1,489,535	2,914,165	1.96	252
10 to 19-----	14	190	204	91	295	2.93	39.73	42.66	19.03	61.68	4,653	4,782,535	8,746,430	1.83	327
20 to 34-----	7	457	464	346	810	.99	64.87	65.87	49.12	114.98	5,657	7,044,612	12,538,067	1.78	199
35 to 49-----	3	333	336	362	698	.57	63.41	63.98	68.93	132.92	4,482	5,251,375	8,129,501	1.55	108
50 to 99-----	14	1,210	1,224	1,129	2,353	.69	59.51	60.20	55.53	115.73	12,892	20,332,158	28,532,373	1.40	183
100 to 149-----	8	1,367	1,375	1,213	2,588	.38	65.51	65.89	58.13	124.02	12,146	20,866,785	31,080,373	1.49	99
150 to 249-----	18	2,791	2,809	2,683	5,492	.44	67.46	67.90	64.85	132.74	22,631	41,372,661	60,113,135	1.45	114
250 or more-----	52	3,686	3,938	6,660	10,598	.61	45.65	46.26	78.24	124.50	43,889	85,125,441	134,521,017	1.58	119
Total or average--	127	10,298	10,425	12,494	22,919	.68	55.20	55.88	66.97	122.85	108,534	186,563,009	287,062,033	1.54	1,534
Strip mines:															
1 to 4-----	-	14	14	7	21	-	19.30	19.30	9.65	28.96	705	725,248	2,982,683	4.11	265
5 to 9-----	-	34	34	39	73	-	15.81	15.81	18.14	33.95	1,791	2,149,957	7,776,888	3.62	254
10 to 19-----	-	134	136	129	265	.32	21.49	21.81	20.69	42.50	4,845	6,234,673	21,204,663	3.40	337
20 to 34-----	1	156	157	162	319	.14	22.39	22.54	23.25	45.79	4,718	6,966,854	26,117,567	3.75	185
35 to 49-----	2	122	124	199	323	.41	24.80	25.20	40.45	65.65	3,442	4,919,937	23,185,918	4.71	83
50 to 99-----	1	231	232	379	611	.11	24.65	24.76	40.44	65.20	5,900	9,371,422	44,391,764	4.74	63
100 to 149-----	5	250	255	602	857	.49	24.70	25.19	59.47	84.66	4,879	10,123,173	52,037,677	5.14	41
150 to 249-----	2	140	142	386	528	.32	22.56	22.88	62.20	85.08	3,058	6,205,565	31,922,018	5.14	16
250 or more-----	5	97	102	230	332	1.56	30.35	31.91	71.96	103.88	1,471	3,196,085	22,539,235	7.05	5
Total or average--	18	1,178	1,196	2,133	3,329	.36	23.61	23.97	42.75	66.72	30,809	49,892,914	232,158,413	4.65	1,269
Auger mines:															
1 to 4-----	1	2	3	6	9	2.78	5.56	8.34	16.67	25.01	519	359,837	2,533,285	7.10	167
5 to 9-----	-	21	21	13	34	-	40.00	40.00	24.76	64.77	588	524,952	2,743,062	5.23	87
10 to 19-----	-	13	13	9	22	-	23.71	23.71	16.41	40.12	541	548,341	2,125,992	3.88	42
20 to 34-----	-	7	7	8	15	-	21.60	21.60	24.68	46.28	380	328,093	1,001,256	3.09	15
35 to 49-----	-	3	3	3	6	-	21.74	21.74	20.03	43.48	127	138,005	448,265	3.25	3
50 to 99-----	-	3	3	1	4	-	60.09	60.09	-	80.11	218	49,929	371	.01	3
100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average--	1	49	50	40	90	.51	25.19	25.70	20.56	46.27	2,373	1,945,157	8,872,231	4.56	317

TABLE 28. - Number of injuries, frequency rates per million man-hours, employment, worktime, and production data at bituminous coal mines in the United States, by general work location and employment size group, 1972 - Continued

General work location and employment size group	Number of injuries				Frequency rates per million man-hours						Average men working daily	Man-hours worked	Production, short tons	Tons per man-hour	Number of operations
	Fatal	Non-fatal disabling	All disabling	Non-disabling	All disabling	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries					
Other surface mining:															
1 to 4-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 to 9-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 to 19-----	-	-	-	-	-	-	-	-	-	-	17	7,764	-	-	1
20 to 34-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35 to 49-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50 to 99-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average--	-	-	-	-	-	-	-	-	-	-	17	7,764	-	-	1
Total or average, surface-----	19	1,227	1,246	2,173	3,419	0.37	23.67	24.03	41.91	65.95	33,199	51,845,835	241,030,644	4.65	1,587
Total or average, mining-----	146	11,525	11,671	14,667	26,338	.61	48.34	48.95	61.52	110.47	141,733	238,408,844	528,092,677	2.22	3,121
Independent shops and yards:															
1 to 4-----	-	-	-	3	3	-	-	-	126.15	126.15	12	23,781	-	-	6
5 to 9-----	1	1	1	-	1	-	120.47	120.47	-	120.47	7	8,301	-	-	1
10 to 19-----	-	7	7	6	13	-	73.80	73.80	63.26	137.06	57	94,848	-	-	4
20 to 34-----	-	1	1	4	5	-	10.31	10.31	41.23	51.53	72	97,022	-	-	3
35 to 49-----	-	8	8	36	44	-	27.36	27.36	123.10	150.46	285	292,440	-	-	7
50 to 99-----	11	11	11	31	42	-	9.98	9.98	28.11	38.09	615	1,102,719	-	-	9
100 to 149-----	1	1	1	7	8	-	1.79	1.79	12.51	14.30	220	559,476	-	-	2
150 to 249-----	14	14	14	52	66	-	12.21	12.21	45.34	57.54	582	1,147,005	-	-	3
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average	-	43	43	139	182	-	12.93	12.93	41.80	54.73	1,850	3,325,592	-	-	35
Mechanical cleaning plants:															
1 to 4-----	2	18	20	20	40	3.49	31.43	34.92	34.92	69.85	518	572,681	-	-	206
5 to 9-----	1	50	51	49	100	.68	33.78	34.46	33.11	67.57	1,245	1,479,975	-	-	181
10 to 19-----	-	82	82	125	207	-	26.21	26.21	39.95	66.15	2,115	3,129,040	-	-	148
20 to 34-----	1	131	132	307	439	.18	23.51	23.69	55.09	78.78	3,662	5,572,408	-	-	141
35 to 49-----	-	73	73	130	203	-	22.29	22.29	39.70	61.99	2,418	3,274,915	-	-	58
50 to 99-----	2	76	78	201	279	.48	18.27	18.75	48.31	67.06	2,594	4,160,384	-	-	43
100 to 149-----	1	1	1	36	37	-	1.67	1.67	60.14	61.82	473	598,557	-	-	4
150 to 249-----	1	13	14	26	40	1.23	15.94	17.16	31.87	49.03	677	815,812	-	-	4
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average--	7	444	451	894	1,345	.36	22.65	23.01	45.60	68.61	13,702	19,603,772	-	-	785
Grand total or average-----	153	12,012	12,165	15,700	27,865	.59	45.96	46.55	60.08	106.62	157,285	261,338,208	528,092,677	2.02	3,941

TABLE 29. - Number of injuries, frequency rates per million man-hours, employment, worktime, and production data at Pennsylvania anthracite mines in the United States, by general work location and employment size group, 1972

General work location and employment size group	Number of injuries				Frequency rates per million man-hours								Average men working daily	Man-hours worked	Production, short tons	Tons per man-hour	Number of operations
	Fatal	Non-fatal disabling	All disabling	Non-fatal disabling	Fatal	Non-fatal disabling	All disabling	Non-disabling	All in-juries								
Underground mines (includes surface works):	1 to 4-----	1	3	4		10.61	31.82	42.42	-	42.42	105	94,288	62,023	0.66	32		
	5 to 9-----	-	4	4	3	-	23.90	23.90	17.93	41.83	176	167,336	137,265	.82	24		
	10 to 19-----	-	12	12	11	23	-	107.93	98.94	206.87	109	111,182	84,181	.76	9		
	20 to 34-----	-	3	3	2	5	-	70.01	46.67	116.68	61	42,852	7,916	.18	2		
	35 to 49-----	-	2	2	1	3	-	48.89	24.45	73.34	73	40,907	2,038	.05	2		
	50 to 99-----	-	18	18	1	19	-	96.88	5.38	102.27	125	185,788	110,937	.60	2		
	100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	150 to 249-----	-	35	35	38	-	-	100.86	109.51	210.38	213	346,999	247,844	.71	1		
	250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Total or average---	1	77	78	56	134	1.01	77.83	78.84	56.60	135.44	862	989,352	652,204	.66	72	
Strip mines:	1 to 4-----	-	1	1	-	-	14.79	14.79	-	14.79	61	67,616	79,125	1.17	24		
	5 to 9-----	4	4	4	14	-	19.55	19.55	68.41	87.96	152	204,648	339,832	1.66	21		
	10 to 19-----	1	23	24	21	45	2.70	62.14	56.74	121.59	248	370,108	521,746	1.41	19		
	20 to 34-----	-	12	12	17	29	-	28.65	40.58	69.23	339	418,921	697,564	1.67	13		
	35 to 49-----	1	14	15	13	28	2.90	40.60	37.70	81.20	341	344,810	753,496	2.19	8		
	50 to 99-----	-	46	46	49	95	-	53.82	57.33	111.15	815	854,664	875,278	1.02	11		
	100 to 149-----	-	27	27	23	50	-	71.16	60.62	131.78	226	379,414	405,408	1.07	2		
	150 to 249-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Total or average---	2	127	129	137	266	.76	48.10	48.86	51.89	100.75	2,182	2,640,181	3,672,449	1.39	98	
Culm banks:	1 to 4-----	-	1	1	-	-	25.10	25.10	-	25.10	49	39,846	416,831	10.46	22		
	5 to 9-----	-	1	1	3	4	-	11.83	35.49	47.32	85	84,536	916,541	10.84	13		
	10 to 19-----	-	6	6	4	10	-	63.52	42.34	105.86	67	94,465	417,702	4.42	5		
	20 to 34-----	-	2	2	3	5	-	31.17	46.76	77.94	58	64,154	63,441	.99	2		
	35 to 49-----	-	4	4	3	7	-	211.29	158.47	369.76	38	18,931	-	-	1		
	50 to 99-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	150 to 249-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Total or average---	-	14	14	13	27	-	46.37	46.37	43.06	89.42	297	301,932	1,814,515	6.01	43	

TABLE 29. - Number of injuries, frequency rates per million man-hours, employment, worktime, and production data at Pennsylvania anthracite mines in the United States, by general work location and employment size group, 1972 - Continued

General work location and employment size group	Number of injuries				Frequency rates per million man-hours				Average men working daily	Man-hours worked	Production, short tons	Tons per man-hour	Number of operations
	Fatal	Non-fatal disabling	All disabling	Non-fatal disabling	Fatal	Non-fatal disabling	All disabling	Non-fatal disabling					
Dredges:													
1 to 4-----	-	-	-	-	-	-	-	-	1	550	5,100	9.27	1
5 to 9-----	-	-	-	-	-	-	-	-	-	-	-	-	-
10 to 19-----	-	-	-	-	-	-	-	-	17	45,224	349,128	7.72	1
20 to 34-----	-	-	-	-	-	-	-	-	-	-	-	-	-
35 to 49-----	-	-	-	-	-	-	-	-	-	-	-	-	-
50 to 99-----	-	-	-	-	-	-	-	-	-	-	-	-	-
100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average	-	-	-	2	-	-	-	43.69	18	45,774	354,228	7.74	2
Total or average, surface-----	2	141	143	152	0.67	47.19	47.86	50.87	2,497	2,987,887	5,841,192	1.95	143
Total or average, mining-----	3	218	221	208	.75	54.81	55.57	52.30	3,359	3,977,239	6,493,396	1.63	215
Independent shops and yards:													
1 to 4-----	-	-	-	-	-	-	-	-	-	-	-	-	-
5 to 9-----	-	-	-	-	-	-	-	-	-	-	-	-	-
10 to 19-----	-	2	2	6	-	54.76	54.76	164.29	19	36,521	-	-	1
20 to 34-----	-	-	-	12	-	-	-	289.82	21	41,405	-	-	1
35 to 49-----	-	-	-	-	-	-	-	-	-	-	-	-	-
50 to 99-----	-	-	-	-	-	-	-	-	-	-	-	-	-
100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average--	-	2	2	18	-	25.67	25.67	230.99	40	77,926	-	-	2
Mechanical cleaning plants:													
1 to 4-----	-	5	5	3	-	56.36	56.36	33.82	67	88,717	-	-	23
5 to 9-----	-	6	6	11	-	32.58	32.58	59.73	158	184,175	-	-	22
10 to 19-----	-	15	15	18	-	46.08	46.08	55.29	241	325,532	-	-	17
20 to 34-----	-	37	37	41	-	63.35	63.35	70.20	389	584,077	-	-	15
35 to 49-----	-	11	11	31	-	39.12	39.12	110.25	205	281,178	-	-	5
50 to 99-----	-	15	15	39	-	35.96	35.96	93.49	312	417,138	-	-	4
100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	8	8	21	-	29.02	29.02	76.19	151	275,635	-	-	1
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average--	-	97	97	164	-	44.98	44.98	76.05	1,523	2,156,452	-	-	87
Grand total or average-----	3	317	320	390	.48	51.03	51.52	62.79	4,922	6,211,617	6,493,396	1.05	304

TABLE 30. - Number of injuries and frequency rates per million tons at bituminous coal mines in the United States, by general work location and employment size group, 1972

General work location and employment size group	Number of injuries					Frequency rates per million tons				
	Fatal	Nonfatal disabling	All disabling	Nondisabling	All injuries	Fatal	Nonfatal disabling	All disabling	Nondisabling	All injuries
Underground mines (includes surface works):										
1 to 4-----	5	16	21	2	23	10.71	34.26	44.97	4.28	49.25
5 to 9-----	6	48	54	8	62	2.06	16.47	18.53	2.75	21.28
10 to 19-----	14	190	204	91	295	1.60	21.72	23.32	10.40	33.73
20 to 34-----	7	457	464	346	810	.56	36.39	36.95	27.55	64.50
35 to 49-----	3	333	336	362	698	.37	40.96	41.33	44.53	85.86
50 to 99-----	14	1,210	1,224	1,129	2,353	.49	42.41	42.90	39.57	82.47
100 to 149-----	8	1,367	1,375	1,213	2,588	.26	43.98	44.24	39.03	83.27
150 to 249-----	18	2,791	2,809	2,683	5,492	.30	46.43	46.73	44.63	91.36
250 or more-----	52	3,886	3,938	6,660	10,598	.39	28.89	29.27	49.51	78.78
Total or average-----	127	10,298	10,425	12,494	22,919	.44	35.87	36.32	43.52	79.84
Strip mines:										
1 to 4-----	-	14	14	7	21	-	4.69	4.69	2.35	7.04
5 to 9-----	-	34	34	39	73	-	4.37	4.37	5.01	9.39
10 to 19-----	2	134	136	129	265	.09	6.32	6.41	6.08	12.50
20 to 34-----	1	156	157	162	319	.04	5.97	6.01	6.20	12.21
35 to 49-----	2	122	124	199	323	.09	5.26	5.35	8.58	13.93
50 to 99-----	1	231	232	379	611	.02	5.20	5.23	8.54	13.76
100 to 149-----	5	250	255	602	857	.10	4.80	4.90	11.57	16.47
150 to 249-----	2	140	142	386	528	.06	4.39	4.45	12.09	16.54
250 or more-----	5	97	102	230	332	.22	4.30	4.53	10.20	14.73
Total or average-----	18	1,178	1,196	2,133	3,329	.08	5.07	5.15	9.19	14.34
Auger mines:										
1 to 4-----	1	2	3	6	9	.39	.78	1.17	2.35	3.52
5 to 9-----	-	21	21	13	34	-	7.66	7.66	4.74	12.39
10 to 19-----	-	13	13	9	22	-	6.11	6.11	4.23	10.35
20 to 34-----	-	7	7	8	15	-	6.99	6.99	7.99	14.98
35 to 49-----	-	3	3	3	6	-	6.69	6.69	6.69	13.38
50 to 99-----	-	3	3	1	4	-	8,086.25	8,086.25	2,695.42	10,781.67
100 to 149-----	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-
Total or average-----	1	49	50	40	90	.11	5.52	5.64	4.51	10.14

TABLE 31. - Number of injuries and frequency rates per million tons at Pennsylvania anthracite mines in the United States, by general work location and employment size group, 1972

General work location and employment size group	Number of injuries				Frequency rates per million tons					
	Fatal	Nonfatal disabling	All disabling	Nondisabling	All injuries	Fatal	Nonfatal disabling	All disabling	Nondisabling	All injuries
Underground mines (includes surface works):										
1 to 4-----	1	3	4	-	4	16.12	48.37	64.49	-	64.49
5 to 9-----	-	4	4	3	7	-	29.14	29.14	21.86	51.00
10 to 19-----	-	12	12	11	23	-	142.55	142.55	130.67	273.22
20 to 34-----	-	3	3	2	5	-	378.98	378.98	252.65	631.63
35 to 49-----	-	2	2	1	3	-	981.35	981.35	490.68	1,472.03
50 to 99-----	-	18	18	1	19	-	162.25	162.25	9.01	171.27
100 to 149-----	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	35	35	38	73	-	141.22	141.22	153.32	294.54
250 or more-----	-	-	-	-	-	-	-	-	-	-
Total or average-----	1	77	78	56	134	1.53	118.06	119.59	85.86	205.46
Strip mines:										
1 to 4-----	-	1	1	-	1	-	12.64	12.64	-	12.64
5 to 9-----	-	4	4	14	18	-	11.77	11.77	41.20	52.97
10 to 19-----	1	23	24	21	45	-	44.08	46.00	40.25	86.25
20 to 34-----	-	12	12	17	29	1.92	17.20	17.20	24.37	41.57
35 to 49-----	1	14	15	13	28	1.33	18.58	19.91	17.25	37.16
50 to 99-----	-	46	46	49	95	-	52.55	52.55	55.98	108.54
100 to 149-----	-	27	27	23	50	-	66.60	66.60	56.73	123.33
150 to 249-----	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-
Total or average-----	2	127	129	137	266	.54	34.58	35.13	37.30	72.43
Culm banks:										
1 to 4-----	-	1	1	-	1	-	2.40	2.40	-	2.40
5 to 9-----	-	6	6	3	4	-	1.09	1.09	3.27	4.36
10 to 19-----	-	1	1	4	10	-	14.36	14.36	9.58	23.94
20 to 34-----	-	2	2	3	5	-	31.53	31.53	47.29	78.81
35 to 49-----	-	4	4	3	7	-	-	-	-	-
50 to 99-----	-	-	-	-	-	-	-	-	-	-
100 to 149-----	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-
Total or average-----	-	14	14	13	27	-	7.72	7.72	7.16	14.88

TABLE 32. - Injury experience, worktime, and production data at bituminous coal mines in the United States, by production size group, 1972

General work location and production size group	Number of injuries					Frequency rates											Average men working daily	Man-hours worked	Production, short tons	Tons per man-hour	Number of mines
	Per million man-hours					Per million tons															
	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries						
Underground mines (includes surface works):	27	782	809	1,225	2,034	1.21	34.97	36.18	54.78	90.96	4.55	131.74	136.29	206.37	342.65	19,198	22,360,732	5,936,038	0.27	674	
	6	256	262	401	659	1.39	59.34	60.73	37.32	98.05	.89	37.99	38.88	23.89	62.77	3,333	4,313,939	6,738,379	1.56	189	
	4	473	477	601	878	.57	66.89	67.46	56.71	124.17	.38	45.41	45.79	38.50	84.29	5,222	7,010,904	10,416,804	1.47	149	
	5	599	604	912	1,116	.55	65.55	66.10	56.03	122.13	.36	42.93	43.28	36.69	79.98	6,148	9,138,135	13,934,275	1.53	111	
	9	942	951	1,781	1,732	.72	72.09	72.78	59.77	132.55	.46	47.69	48.14	39.54	87.68	7,595	13,066,710	19,753,087	1.51	99	
	17	2,355	2,372	1,840	4,212	.50	68.65	69.14	53.64	122.78	.33	46.35	46.68	36.21	82.89	17,988	34,305,904	50,813,111	1.48	140	
	26	1,756	1,782	2,049	3,831	.89	59.95	60.84	69.96	130.80	.61	41.30	41.91	48.19	90.10	15,759	29,289,901	42,520,209	1.45	69	
	10	902	912	1,286	2,198	.57	51.84	52.42	73.91	126.33	.33	29.94	30.27	42.69	72.96	8,670	17,398,768	30,125,307	1.73	34	
	23	2,233	2,256	4,239	6,495	.46	45.00	45.47	85.43	130.90	.22	20.91	21.12	39.69	60.81	24,179	49,618,016	106,804,823	2.15	69	
	Total or average-----	127	10,298	10,425	12,494	22,919	.68	55.20	55.88	66.97	122.85	.44	35.87	36.32	43.52	79.84	108,534	186,563,009	287,062,033	1.54	1,534
Strip mines:	2	74	76	99	175	.60	22.07	22.66	29.52	52.18	.44	16.37	16.81	21.90	38.71	4,925	3,353,612	4,521,175	1.35	498	
	-	70	70	54	124	-	21.44	21.44	16.54	37.99	-	8.72	8.72	6.73	15.45	3,018	3,264,232	8,028,280	2.46	219	
	-	111	111	125	236	-	21.38	21.38	24.08	45.46	-	7.28	7.28	8.20	15.48	3,408	5,190,886	15,250,300	2.94	211	
	-	94	94	76	170	-	25.32	25.32	20.47	45.79	-	8.01	8.01	6.48	14.48	2,422	3,712,851	11,756,334	3.16	97	
	2	130	130	87	167	.48	18.57	19.05	20.72	39.77	.12	4.74	4.86	5.29	10.15	2,669	4,159,376	16,433,030	3.92	83	
	8	60	60	239	338	.21	20.70	20.91	30.47	71.36	.06	5.37	5.43	13.11	18.34	2,569	4,753,271	18,235,471	3.65	53	
	1	70	71	114	185	.28	19.94	20.43	32.46	52.71	.06	4.35	4.41	7.08	11.69	1,769	3,510,490	16,104,169	4.39	26	
	2	114	116	193	309	.30	28.26	28.76	47.85	76.61	.11	6.25	6.36	10.59	16.59	1,915	4,033,591	18,233,168	4.52	21	
	10	469	479	1,146	1,623	.36	26.21	26.77	64.05	90.82	.08	5.79	5.88	9.27	13.15	7,890	17,893,045	123,596,532	6.91	59	
	Total or average-----	18	1,178	1,196	2,133	3,329	.36	23.61	23.97	42.75	66.72	.08	5.07	5.15	9.19	14.34	30,809	49,892,914	232,158,413	4.65	1,269
Auger mines:	1	19	20	10	30	1.51	28.61	30.11	15.06	45.17	.53	10.03	10.56	5.28	15.83	1,415	664,194	1,894,635	2.85	210	
	-	25	10	7	17	-	24.38	24.38	17.07	41.45	-	5.14	5.14	3.60	8.73	324	410,118	1,946,908	4.75	53	
	-	11	11	10	21	-	20.60	20.60	18.73	39.33	-	4.24	4.24	3.86	8.10	411	533,956	2,592,030	4.85	39	
	5	5	5	5	10	-	46.31	46.31	46.31	92.62	-	5.32	5.32	5.32	10.64	73	107,971	399,844	8.70	8	
	4	4	4	8	12	-	21.60	21.60	43.21	64.81	-	3.22	3.22	6.44	9.67	128	185,158	1,241,321	6.70	12	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	43,760	257,493	5.88	1	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total or average-----	1	49	50	40	90	.51	25.19	25.70	20.56	46.27	.11	5.52	5.64	7.51	10.14	2,373	1,945,157	8,872,231	4.56	317	
Other surface mining:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	7,764	-	-	1	
	19	1,227	1,246	2,173	3,419	.37	23.67	24.03	41.91	65.95	.08	5.09	5.17	9.02	14.18	33,199	51,845,835	261,030,644	4.65	1,587	
	146	11,525	11,671	14,667	26,338	.61	48.34	48.95	61.52	110.47	.28	21.82	22.10	27.77	49.87	141,733	238,408,864	528,092,677	2.22	3,121	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,850	3,325,592	-	-	35
	7	444	451	894	1,345	.36	22.65	23.01	45.60	68.61	-	-	-	-	-	13,702	19,603,772	-	-	785	
	153	12,012	12,165	15,700	27,865	.59	45.96	46.55	60.08	106.62	.29	22.75	23.04	29.73	52.77	157,285	26,338,208	528,092,677	2.02	3,941	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

TABLE 33. - Injury experience, worktime, and production data at Pennsylvania anthracite mines in the United States, by production size group, 1972

General work location and production size group	Number of injuries					Frequency rates												Man-hours worked	Production, short tons	Tons per man-hour	Number of mines
						Per million man-hours					Per million tons										
	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries	Average men working daily					
Underground mines (includes surface works):	1	36	37	20	57	1.73	62.15	63.88	34.53	98.41	3.73	134.35	138.09	74.64	212.73	614	579,202	267,950	0.46	69	
	-	-	-	1	1	-	-	-	134.08	134.08	-	-	-	38.39	38.39	5	7,458	26,051	3.49	1	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	-	15	15	1	16	-	128.57	8.57	137.14	137.14	-	135.92	-	9.06	144.98	60	116,667	110,359	.95	1	
	-	26	26	34	60	-	90.90	118.87	209.77	209.77	-	104.90	104.90	137.18	242.09	183	286,025	247,844	.87	1	
	1	77	78	56	134	1.01	77.83	78.84	56.60	135.44	1.53	118.06	119.59	85.86	205.46	862	989,352	652,204	.66	72	
	Total or average-----																				
	Strip mines:	1	20	21	28	49	1.69	33.88	35.57	47.43	83.01	2.01	40.12	42.13	56.17	98.29	817	590,316	498,505	.84	64
		-	17	17	13	30	-	53.02	53.02	40.54	93.56	-	47.49	47.49	36.31	83.80	273	320,648	357,987	1.12	10
		-	28	28	35	63	-	38.85	38.85	48.56	87.41	-	29.63	29.63	37.04	66.68	511	720,767	944,862	1.31	14
-		4	4	11	15	-	22.04	22.04	60.62	82.66	-	10.41	10.41	28.62	39.03	104	181,459	384,368	2.12	3	
-		43	43	45	88	-	66.57	66.57	69.67	136.24	-	48.07	48.07	50.31	98.38	371	645,931	894,471	1.38	5	
1		15	16	5	21	5.52	82.85	88.37	27.62	115.98	1.69	25.33	27.02	8.44	35.46	106	181,060	592,256	3.27	2	
Total or average-----																					
Culm banks:	2	127	129	137	266	.76	48.10	48.86	51.89	100.75	.54	34.58	35.13	37.30	72.43	2,182	2,640,181	3,672,449	1.39	98	
	Total or average-----																				
	-	6	6	3	9	-	102.89	102.89	51.45	154.34	-	32.12	32.12	16.06	48.18	137	58,314	186,798	3.20	23	
	-	5	5	5	10	-	54.41	54.41	20.17	20.17	-	15.49	15.49	4.50	4.50	47	49,589	222,054	4.48	7	
	-	3	3	2	5	-	43.13	43.13	28.76	108.82	-	4.14	4.14	2.76	6.90	46	91,897	322,687	3.51	5	
	-	-	-	2	2	-	-	-	61.38	61.38	-	-	-	5.58	5.58	20	69,550	724,444	10.42	6	
Total or average-----																					
Dredges:	-	14	14	13	27	-	46.37	46.37	43.06	89.42	-	7.72	7.72	7.16	14.88	297	301,932	1,814,515	6.01	43	
	Total or average-----																				
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	550	5,100	9.27	1	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total or average-----																					
Total or average, surface-----	2	141	143	152	295	.67	47.19	47.86	50.87	98.73	.34	24.14	24.48	26.02	50.50	2,497	2,987,887	5,841,192	1.95	143	
	Total or average, mining-----																				
	-	218	221	208	429	.75	54.81	55.57	52.30	107.86	.46	33.57	34.03	32.03	66.07	3,359	3,977,239	6,493,396	1.63	215	
Independent shops and yards:																					
-	2	2	18	20	-	25.67	25.67	230.99	256.65	-	-	-	-	-	-	40	77,926	-	-	2	
Mechanical cleaning plants:																					
-	97	97	164	261	-	44.98	44.98	76.05	121.03	-	-	-	-	-	-	1,523	2,156,452	-	-	87	
Grand total or average-----																					
3	317	320	390	710	.48	51.03	51.52	62.79	114.30	.46	48.82	49.28	60.06	109.34	4,922	6,211,617	6,493,396	1.05	304		

TABLE 34. - Relative standing of States according to fatal, nonfatal, all disabling, and nondisabling injury rates per million man-hours of exposure, 1972

State	Fatality rate	State	Nonfatal disabling injury rate	State	All disabling injury rate	State	Non-disabling injury rate
Alaska-----	-	California-----	-	California-----	-	California-----	-
Arizona-----	-	Texas-----	4.63	Texas-----	4.63	Maryland-----	2.43
Arkansas-----	-	Montana-----	7.82	Montana-----	7.82	Tennessee-----	14.94
California-----	-	Maryland-----	19.47	Maryland-----	19.47	Iowa-----	20.80
Iowa-----	-	Indiana-----	25.19	Indiana-----	26.10	Arkansas-----	31.03
Kansas-----	-	Alabama-----	25.92	Alabama-----	26.17	Alabama-----	32.22
Maryland-----	-	Wyoming-----	26.03	Wyoming-----	27.52	Montana-----	36.49
Montana-----	-	Tennessee-----	28.79	Tennessee-----	29.52	Virginia-----	39.65
North Dakota-----	-	Missouri-----	31.55	Pennsylvania (bituminous)-----	32.00	Colorado-----	39.90
Oklahoma-----	-	Pennsylvania (bituminous)-----	31.59	Missouri-----	32.36	Oklahoma-----	46.30
Texas-----	-	Alaska-----	36.28	Alaska-----	36.28	Kentucky-----	49.05
Utah-----	-	Kentucky-----	37.06	Kentucky-----	37.79	Pennsylvania (bituminous)-----	50.59
Washington-----	-	Ohio-----	38.48	Ohio-----	38.90	North Dakota-----	52.02
Indiana-----	0.19	Kansas-----	40.12	Kansas-----	40.12	Ohio-----	52.04
Ohio-----	.42	Oklahoma-----	40.79	Oklahoma-----	40.79	Texas-----	53.23
Pennsylvania (bituminous)-----	.48	North Dakota-----	40.87	North Dakota-----	40.87	Arizona-----	55.04
Pennsylvania (anthracite)-----	.49	Illinois-----	42.79	Illinois-----	43.28		
Illinois-----	.58	U. S. Average (bituminous)-----	45.96	U. S. Average (bituminous)-----	46.55	U. S. Average (bituminous)-----	60.08
West Virginia-----	.58	U. S. Average (all coal)-----	46.08	U. S. Average (all coal)-----	46.66	U. S. Average (all coal)-----	60.14
U. S. Average (all coal)-----	.59	New Mexico-----	48.98	New Mexico-----	50.76	Indiana-----	60.97
U. S. Average (bituminous)-----	.73	Pennsylvania (anthracite)-----	51.03	Pennsylvania (anthracite)-----	51.52	Pennsylvania (anthracite)-----	62.79
Kentucky-----	.73	Iowa-----	52.01	Iowa-----	52.01	Wyoming-----	64.70
Tennessee-----	.77	Arkansas-----	54.31	Arkansas-----	54.31	New Mexico-----	70.35
Virginia-----	.81	Virginia-----	57.88	Virginia-----	58.65	Kansas-----	70.69
Missouri-----	.97	West Virginia-----	61.16	West Virginia-----	61.74	West Virginia-----	73.07
Alabama-----	1.49	Washington-----	62.47	Washington-----	62.47	Missouri-----	82.52
Wyoming-----	1.78	Colorado-----	76.61	Utah-----	77.77	Illinois-----	90.01
New Mexico-----	2.00	Utah-----	77.77	Colorado-----	78.60	Utah-----	94.55
Colorado-----		Arizona-----	81.25	Arizona-----	81.25	Alaska-----	95.23
						Washington-----	141.13

TABLE 35. - Worktime and production data at coal mines in the United States, by State and general work location, 1972 - Continued

State	Man-hours of work							
	Underground mines		Strip mines	Other surface mining 1/	Total surface	Total mining	Independent shops and yards	Mechanical cleaning plants
	Underground	Surface						
Alabama-----	5,107,006	776,819	2,810,074	12,408	2,822,482	8,706,307	-	542,527
Alaska-----	-	-	201,593	-	201,593	201,593	-	18,931
Arizona-----	-	-	359,061	-	359,061	359,061	-	22,486
Arkansas-----	22,948	6,319	220,026	-	220,026	249,293	-	8,502
California-----	-	-	-	-	-	-	-	4,210
Colorado-----	1,864,157	320,943	268,923	-	268,923	2,454,023	-	52,212
Illinois-----	12,450,173	1,535,791	6,232,107	2,657	6,234,764	20,220,728	127,224	2,017,103
Indiana-----	548,553	74,605	4,127,454	-	4,127,454	4,750,612	121,213	491,323
Iowa-----	105,428	27,053	148,058	3,723	151,781	284,262	-	288,415
Kansas-----	-	-	462,946	-	462,946	462,946	-	60,464
Kentucky-----	24,984,419	2,499,057	9,132,228	792,328	9,924,556	37,408,032	345,848	40,856,812
Maryland-----	28,320	870	369,799	8,903	378,702	407,892	-	410,976
Massachusetts-----	-	-	1,109,502	-	1,109,502	1,109,502	40,343	1,236,082
Montana-----	1,592	1,693	380,428	-	380,428	383,713	-	383,713
New Mexico-----	343,236	63,899	649,214	-	649,214	1,056,349	-	1,122,896
North Dakota-----	-	-	530,960	-	530,960	530,960	-	7,272
Ohio-----	9,157,020	977,209	7,014,084	101,171	7,115,255	17,249,484	967,254	882,817
Oklahoma-----	86,360	19,518	764,668	-	764,668	870,546	-	907,032
Pennsylvania-----	31,401,307	3,388,028	6,804,646	112,940	6,917,586	41,706,921	407,892	45,622,750
Tennessee-----	1,517,903	133,778	906,760	58,099	964,859	2,616,540	-	2,744,221
Texas-----	-	-	432,056	-	432,056	432,056	-	432,056
Utah-----	2,048,903	365,687	2,414,590	-	-	2,414,590	-	208,474
Virginia-----	15,564,069	908,408	1,089,809	190,704	1,280,513	17,752,990	415,545	19,369,280
Washington-----	22,021	4,401	356,050	-	356,050	382,472	-	432,219
West Virginia-----	64,338,530	5,648,180	4,413,518	667,790	5,081,308	75,068,018	900,273	83,055,520
Wyoming-----	131,103	87,703	1,108,950	2,198	1,111,148	1,329,954	-	1,344,627
Total or average, bituminous-----	169,723,048	16,839,961	49,892,914	1,952,921	51,845,835	238,408,844	3,325,592	19,603,772
Pennsylvania (anthracite)-----	772,412	216,940	2,640,181	347,706	2,987,887	3,977,239	77,926	2,156,452
Grand total or average-----	170,495,460	17,056,901	52,533,095	2,300,627	54,833,722	242,386,083	3,403,518	21,760,224
								267,549,825

See footnote at end of table.

TABLE 35. - Worktime and production data at coal mines in the United States, by State and general work location, 1972 - Continued

State	Production short tons					Tons per man-hour				
	Underground mines	Strip mines	Other surface mining 1/	Total surface	Grand total	Underground mines	Strip mines	Other surface mining 1/	Total surface	Grand total
Alabama-----	7,469,328	10,039,615	52,333	10,091,948	17,561,276	1.27	3.57	4.22	3.58	1.90
Alaska-----	-	500,158	-	500,158	500,158	-	2.48	-	2.48	2.27
Arizona-----	-	2,676,538	-	2,676,538	2,676,538	-	7.45	-	7.45	7.01
Arkansas-----	16,961	393,667	-	393,667	410,628	.58	1.79	-	1.79	1.59
California-----	-	-	-	-	-	-	-	-	-	-
Colorado-----	2,969,016	2,420,957	-	2,420,957	5,389,973	1.36	9.00	-	9.00	2.15
Illinois-----	31,327,664	31,465,359	-	31,465,359	62,793,023	2.24	5.05	-	5.05	2.81
Indiana-----	1,342,405	22,102,780	-	22,102,780	23,445,185	2.15	5.36	-	5.36	4.37
Iowa-----	353,574	347,984	8,196	356,190	709,764	2.67	2.35	2.20	2.35	2.46
Kansas-----	-	1,224,031	-	1,224,031	1,224,031	-	2.64	-	2.64	2.34
Kentucky-----	49,974,363	48,798,096	3,992,697	52,790,793	102,765,156	1.82	5.34	5.04	5.32	2.52
Maryland-----	35,753	836,812	30,719	867,531	903,284	1.22	2.26	3.45	2.29	2.20
Massachusetts-----	-	4,453,849	-	4,453,849	4,453,849	-	4.01	-	4.01	3.60
Montana-----	1,581	6,844,383	-	6,844,383	6,845,964	.48	17.99	-	17.99	17.84
New Mexico-----	885,475	7,269,221	-	7,269,221	8,154,696	2.17	11.20	-	11.20	7.26
North Dakota-----	-	6,814,301	-	6,814,301	6,814,301	-	12.83	-	12.83	12.66
Ohio-----	16,549,351	31,258,588	735,722	31,994,310	48,543,661	1.63	4.46	7.27	4.50	2.54
Oklahoma-----	46,660	2,245,913	-	2,245,913	2,292,573	.44	2.94	-	2.94	2.53
Pennsylvania-----	47,767,336	18,192,485	358,205	18,550,690	66,318,026	1.37	2.67	3.17	2.68	1.45
(bituminous)-----	3,551,025	2,939,338	270,384	3,209,722	6,760,747	2.15	3.24	4.65	3.33	2.46
Tennessee-----	-	3,434,119	-	3,434,119	3,434,119	-	7.95	-	7.95	7.95
Texas-----	-	-	-	-	-	-	-	-	-	-
Utah-----	4,394,151	-	-	-	4,394,151	1.82	-	-	-	1.68
Virginia-----	21,361,175	4,144,038	1,050,511	5,194,549	26,555,724	1.30	3.80	5.51	4.06	1.37
Washington-----	28,722	2,607,583	-	2,607,583	2,636,305	1.09	7.32	-	7.32	6.10
West Virginia-----	98,550,266	12,935,242	2,354,503	15,289,745	113,840,011	1.41	2.93	3.53	3.01	1.37
Wyoming-----	437,227	8,213,346	18,961	8,232,307	8,669,534	2.00	7.41	8.63	7.41	6.45
Total or average, bituminous-----	287,062,033	232,158,413	8,872,231	241,030,644	528,092,677	1.54	4.65	4.54	4.65	2.02
Pennsylvania (anthracite)-----	652,204	3,672,449	2,168,743	5,841,192	6,493,396	.66	1.39	6.24	1.95	1.05
Grand total or average-----	287,714,237	235,830,862	11,040,974	246,871,836	534,586,073	1.53	4.49	4.80	4.50	2.00

1/ Includes bituminous coal, auger mines and anthracite culm banks and dredges.

TABLE 36. - Number of fatal injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1972

State	Underground mines												Strip mines							Other surface mining ^{1/}		Mechanical cleaning plants			Grand total												
	Underground												Surface							Total, underground mines							Total, surface mines							Total, mechanical cleaning plants			
	Falls of roof or back	Falls of face or rib	Intush of water	Sliding or falling material or objects	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires	Total, underground	Sliding or falling material or objects	Haulage	Explosives	Electricity	Machinery	Total, surface	Falls of face or side	Handling material	Haulage	Explosives	Electricity	Machinery		Fires or suffocation from fires	Total, strip mines	Handling material	Total, other surface mining								
Alabama-----	2	1	-	-	1	-	-	-	2	-	-	6	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	3	-	-	9			
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
California-----	3	-	-	1	2	-	-	-	-	1	-	5	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	5				
Colorado-----	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	11	-	11				
Connecticut-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Delaware-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Florida-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Georgia-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Idaho-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Illinois-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Indiana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Kentucky-----	8	1	-	-	7	-	1	-	5	-	-	22	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28				
Louisiana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Maine-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Massachusetts-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Michigan-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Minnesota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
New Hampshire-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
New York-----	1	-	-	-	1	-	-	-	1	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8				
North Carolina-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Pennsylvania (bituminous)-----	7	1	-	-	6	-	-	1	1	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17				
Pennsylvania (anthracite)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2				
Rhode Island-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Virginia-----	6	-	1	-	5	-	-	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13				
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
West Virginia-----	9	3	-	-	13	5	1	-	4	-	-	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2				
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Total bituminous-----	43	6	1	1	37	5	2	2	14	1	9	121	1	1	2	1	1	6	127	1	1	6	1	2	7	18	1	1	19	146	3	1	3	7	153		
Pennsylvania (anthracite)-----	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	2	3	-	-	3				
All coal-----	43	7	1	1	37	5	2	2	14	1	9	122	1	1	2	1	1	6	128	1	1	7	1	2	7	1	20	1	21	149	3	1	3	7	156		

^{1/} Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 3. - Number of nonfatal disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1972

State	Underground																Total, underground	
	Falls of roof or back	Falls of face or rib	Pressure bumps or bursts	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires		Miscellaneous causes
Alabama-----	10	9	-	3	10	27	5	6	2	31	6	2	7	21	-	1	6	146
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	1	1	-	-	1	2	1	-	-	-	-	-	-	-	-	-	-	7
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	40	11	-	3	18	47	6	3	-	19	-	-	2	22	-	-	7	178
Colorado-----	102	38	-	16	42	144	33	12	11	127	-	9	19	129	1	1	19	703
Illinois-----	11	3	-	1	3	9	3	2	-	6	-	-	-	10	-	1	-	49
Indiana-----	2	2	-	-	1	1	-	-	-	1	-	-	-	1	-	-	-	8
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	124	37	1	21	84	219	57	16	22	207	2	19	54	205	-	1	26	1,095
Maryland-----	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	4
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	4	4	-	-	2	11	1	1	1	6	-	-	-	8	-	-	1	39
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	86	16	1	18	38	128	36	12	6	95	-	5	17	118	-	1	26	603
Oklahoma-----	5	-	-	-	-	2	-	-	-	1	-	-	-	2	-	-	-	11
Pennsylvania (bituminous)-	138	24	-	43	95	339	76	36	11	202	2	-	24	179	1	1	35	1,205
Tennessee-----	9	2	-	-	7	12	2	-	-	9	-	-	5	14	-	-	-	61
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	24	12	2	6	10	44	8	7	3	26	-	-	7	27	-	-	8	184
Virginia-----	126	31	-	27	53	264	60	29	12	157	-	1	27	170	1	-	33	991
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia-----	483	181	-	112	274	1,264	269	101	57	668	4	15	177	692	-	5	143	4,449
Wyoming-----	6	1	-	1	-	-	1	-	-	-	-	-	-	5	-	-	-	15
Total bituminous-----	1,173	372	8	251	638	2,516	558	225	128	1,556	14	52	339	1,604	2	11	304	9,751
Pennsylvania (anthracite)-	3	7	-	5	13	20	5	1	1	6	-	-	-	7	-	-	4	72
All coal-----	1,176	379	8	256	651	2,536	563	226	129	1,562	14	52	339	1,611	2	11	308	9,823

TABLE 37. - Number of nonfatal disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1972 - Continued

State	Strip													Total, strip	
	Falls of face or side	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Fires or suffocation from fires		Miscellaneous causes
Alabama-----	2	1	15	12	8	1	-	8	-	1	-	11	1	10	70
Alaska-----	-	-	4	1	-	-	-	1	-	-	-	1	-	1	8
Arizona-----	-	-	7	7	1	1	-	1	-	1	1	5	-	6	30
Arkansas-----	-	-	2	1	-	-	-	-	-	-	-	2	-	1	6
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	2	2	-	-	-	-	-	-	-	1	-	-	7
Illinois-----	5	5	42	30	12	5	1	17	5	1	5	32	-	17	175
Indiana-----	3	4	21	14	3	5	1	10	-	-	1	8	-	6	74
Iowa-----	1	-	1	1	-	-	-	-	-	1	-	1	-	3	7
Kansas-----	1	-	3	1	1	-	-	3	1	-	-	2	-	7	19
Kentucky-----	3	4	45	65	29	5	1	35	-	-	5	38	1	30	261
Maryland-----	-	-	-	1	-	-	-	1	-	-	-	-	-	2	4
Missouri-----	1	-	8	7	4	-	-	4	-	-	2	3	-	6	35
Montana-----	-	-	1	1	-	-	-	-	-	-	-	1	-	-	3
New Mexico-----	-	-	2	2	-	1	-	-	-	-	-	3	-	1	12
North Dakota-----	-	2	3	3	6	1	-	1	-	-	3	6	-	22	81
Ohio-----	2	3	26	17	5	2	1	7	-	1	-	13	-	4	22
Oklahoma-----	-	6	6	5	1	1	-	-	-	-	-	4	-	3	22
Oklahoma (bituminous)-----	1	3	42	31	13	3	1	14	-	2	-	24	-	6	140
Pennsylvania-----	-	-	3	1	1	-	-	1	-	-	-	3	-	3	12
Tennessee-----	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia-----	1	-	8	8	4	1	-	2	-	-	-	5	-	1	30
Washington-----	-	5	5	4	2	-	-	4	-	-	-	4	-	2	21
West Virginia-----	3	3	27	26	14	2	-	10	-	1	-	26	-	13	125
Wyoming-----	-	-	3	3	-	-	-	-	-	-	2	3	-	1	12
Total bituminous-----	19	25	276	244	104	28	4	122	6	8	19	196	2	125	1,178
Pennsylvania (anthracite)-----	1	6	23	37	11	4	-	20	-	-	-	10	-	15	127
All coal-----	20	31	299	281	115	32	4	142	6	8	19	206	2	140	1,305

TABLE 37. - Number of nonfatal disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1972 - Continued

State	Other surface mining 1/										Total, surface	Total, mining
	Falls of face or side	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery	Miscellaneous causes	Total, other surface mining
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	221
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	8
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	30
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	13
California-----	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	-	-	-	-	-	-	-	-	192
Illinois-----	-	-	-	-	-	-	-	-	-	-	-	922
Indiana-----	-	-	-	-	-	-	-	-	-	-	-	74
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	127
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	7
Kentucky-----	-	-	-	-	-	-	-	-	-	-	-	15
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	19
Massachusetts-----	-	-	-	-	-	-	-	-	-	-	-	281
Michigan-----	-	-	-	-	-	-	-	-	-	-	-	1,463
Minnesota-----	-	-	-	-	-	-	-	-	-	-	-	4
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	35
Montana-----	-	-	-	-	-	-	-	-	-	-	-	3
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	12
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	54
Ohio-----	-	-	-	-	-	-	-	-	-	-	-	22
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	81
Pennsylvania (bituminous)-----	-	-	-	-	-	-	-	-	-	-	-	714
Pennsylvania (anthracite)-----	-	-	-	-	-	-	-	-	-	-	-	22
Texas-----	-	-	-	-	-	-	-	-	-	-	-	36
Utah-----	-	-	-	-	-	-	-	-	-	-	-	1,391
Virginia-----	-	-	-	-	-	-	-	-	-	-	-	13
Washington-----	-	-	-	-	-	-	-	-	-	-	-	76
West Virginia-----	-	-	-	-	-	-	-	-	-	-	-	2
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	200
Total bituminous-----	2	1	5	11	4	1	1	5	1	14	4	1,227
Pennsylvania (anthracite)-----	-	3	4	2	3	-	-	1	-	-	1	141
All coal-----	2	4	9	13	7	1	1	6	1	14	5	1,368
												63
												11,525
												218
												11,743

See footnote at end of table.

TABLE 37. - Number of nonfatal disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1972 - Continued

State	Independent shops and yards								
	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Haulage	Electricity	Machinery	Miscellaneous causes	Total, independent shops and yards
Illinois-----	-	1	-	1	-	-	-	-	2
Indiana-----	1	2	2	1	-	-	-	1	7
Ohio-----	-	5	2	1	-	-	1	3	12
Pennsylvania (bituminous)-----	-	-	-	-	-	-	1	-	1
Virginia-----	-	-	4	-	-	-	2	-	6
West Virginia-----	1	2	6	1	1	1	2	1	15
Total bituminous-----	2	10	14	4	1	1	6	5	43
Pennsylvania (anthracite)-----	1	-	-	-	-	-	-	1	2
All coal-----	3	10	14	4	1	1	6	6	45

TABLE 37. - Number of nonfatal disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1972 - Continued

State	Mechanical cleaning plants														Grand total	
	Sliding or falling material or objects	Slices or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires	Miscellaneous causes		Total, mechanical cleaning plants
Alabama-----	-	3	2	-	1	-	3	-	-	-	1	-	-	2	12	233
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
Arizona-----	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	31
Arkansas-----	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	14
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	7	10	-	-	-	1	-	-	2	6	-	-	5	33	957
Illinois-----	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	192
Indiana-----	-	-	1	2	-	-	-	-	-	-	-	-	-	1	5	139
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
Kansas-----	-	-	1	-	-	-	-	-	-	-	1	-	-	-	2	21
Kentucky-----	3	7	12	4	1	-	10	-	-	3	6	-	-	5	51	1,514
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
Massachusetts-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Missouri-----	-	1	1	-	-	1	-	-	-	1	-	-	-	-	4	33
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
New Mexico-----	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	55
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22
Ohio-----	-	6	3	-	-	-	-	-	-	-	-	-	-	-	9	735
Oklahoma-----	-	1	-	-	-	-	-	-	1	-	-	-	-	-	1	37
Pennsylvania (bituminous)-----	-	9	12	3	1	1	4	-	-	5	7	-	1	6	49	1,441
Pennsylvania (anthracite)-----	-	-	-	-	-	-	3	-	-	-	-	-	-	-	3	79
Tennessee-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Utah-----	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	204
Virginia-----	2	8	7	6	1	2	6	-	1	1	3	-	-	6	43	1,121
Washington-----	-	3	-	-	-	-	-	-	-	-	-	-	-	-	3	27
West Virginia-----	-	45	68	15	6	1	43	1	-	2	15	-	1	15	270	5,080
Wyoming-----	7	-	-	-	-	-	-	-	-	-	1	-	-	-	2	35
Total bituminous-----	12	93	120	34	10	5	70	1	1	14	41	1	2	40	444	12,012
Pennsylvania (anthracite)-----	4	18	33	9	3	1	16	-	-	-	4	-	-	9	97	317
All coal-----	16	111	153	43	13	6	86	1	1	14	45	1	2	49	541	12,329

1/ Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 30. - Number of nondisabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1972

State	Underground																	Total, underground
	Falls of roof or back	Falls of face or rib	Pressure bumps or bursts	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires	Miscellaneous causes	
Alabama-----	13	3	-	7	11	36	18	5	2	33	9	1	8	16	-	-	5	167
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	1	3	-	6	9	20	6	-	-	6	-	-	-	10	1	1	3	68
Colorado-----	221	39	-	43	88	299	158	33	23	178	-	14	42	168	1	-	48	1,354
Illinois-----	7	1	-	1	2	17	5	3	1	3	-	-	1	5	-	-	2	48
Indiana-----	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	4
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	127	24	4	42	81	331	168	31	27	170	-	7	52	180	1	-	40	1,285
Mississippi-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	8	4	-	1	7	14	4	2	1	2	-	-	-	7	-	-	1	51
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	65	18	-	18	50	142	74	25	16	94	-	3	13	101	1	-	23	642
Oklahoma-----	2	1	-	3	1	3	2	-	-	1	-	-	-	1	-	-	-	16
Pennsylvania (bituminous)-----	151	45	-	87	148	495	216	86	38	237	1	3	68	255	1	21	64	1,916
Tennessee-----	1	1	-	-	-	3	3	-	-	10	-	-	-	6	-	-	-	28
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	16	6	2	4	11	57	8	9	4	25	-	-	10	35	-	-	19	206
Virginia-----	67	17	1	25	22	147	76	12	8	72	-	1	19	105	-	-	25	597
Washington-----	1	1	-	1	-	-	-	-	-	2	-	-	-	1	-	-	-	5
West Virginia-----	483	172	1	180	303	1,295	577	137	94	657	2	13	234	715	1	1	161	5,025
Wyoming-----	5	-	-	1	4	6	1	2	-	3	-	-	-	2	-	-	-	24
Total bituminous-----	1,170	335	8	416	738	2,866	1,317	345	214	1,493	12	42	451	1,610	2	25	392	11,436
Pennsylvania (anthracite)-----	1	-	-	5	17	13	5	1	4	2	-	-	-	3	-	-	1	52
All coal-----	1,171	335	8	421	755	2,879	1,322	346	218	1,495	12	42	451	1,613	2	25	393	11,488

TABLE 38. - Number of non disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1972 - Continued

State	Strip															Total, strip
	Falls of face or side	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from	Miscellaneous causes	
Alabama-----	-	2	11	27	16	1	-	7	-	-	1	14	-	1	17	97
Alaska-----	-	1	3	9	-	2	-	-	-	-	-	-	-	-	1	1
Arizona-----	-	-	3	5	3	-	1	-	-	-	-	4	-	-	4	19
Arkansas-----	-	-	-	3	1	-	-	-	-	-	-	-	-	-	1	-
California-----	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	8	5	-	-	-	-	-	-	-	-	-	1	21
Illinois-----	10	13	72	82	53	9	6	37	-	4	3	62	1	2	80	434
Indiana-----	2	3	32	55	48	2	6	17	-	-	12	33	-	-	45	255
Iowa-----	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Kansas-----	-	-	-	8	4	-	-	9	-	-	-	3	-	-	4	28
Kentucky-----	3	9	59	120	85	7	5	38	1	3	3	53	-	-	72	458
Maryland-----	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Massachusetts-----	-	3	18	29	7	1	1	6	-	-	1	10	-	-	23	99
Michigan-----	-	-	2	3	1	-	-	1	-	-	-	2	-	-	5	14
New Mexico-----	-	-	4	3	1	-	-	5	-	-	1	4	-	-	2	13
North Dakota-----	-	-	34	61	31	2	1	13	-	-	8	20	-	-	7	28
Ohio-----	2	7	3	7	4	2	2	2	-	-	1	3	-	-	35	215
Oklahoma-----	1	1	25	23	14	2	2	3	-	-	1	9	-	-	12	93
Pennsylvania (bituminous)-----	1	1	1	1	2	-	-	-	-	-	1	2	-	-	-	8
Pennsylvania (anthracite)-----	-	-	4	4	4	-	-	-	-	-	1	3	-	-	8	23
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia-----	1	3	3	8	3	-	1	1	-	-	-	4	-	-	2	26
Washington-----	-	1	9	7	9	1	-	6	-	-	-	6	-	-	14	53
West Virginia-----	3	4	20	40	27	1	2	9	-	-	2	19	1	1	19	147
Wyoming-----	-	2	8	9	2	3	-	4	-	-	2	12	-	-	10	52
Total bituminous-----	23	53	313	515	322	30	30	158	1	7	35	275	2	4	365	2,133
Pennsylvania (anthracite)-----	-	7	20	36	29	1	1	5	-	-	1	13	-	-	24	137
All coal-----	23	60	333	551	351	31	31	163	1	7	36	288	2	4	389	2,270

TABLE 38. - Number of nondisabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1972 - Continued

State	Other surface mining ^{1/}										Total, surface	Total, mining
	Falls of face or side	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Haulage	Electricity	Machinery	Miscellaneous causes	Total, other surface mining		
Alabama-----	1	1	6	10	8	2	-	9	3	40	2,173	277
Alaska-----	-	1	4	2	2	-	1	2	3	15	152	17
Arizona-----	-	-	-	-	-	-	-	-	-	-	19	19
Arkansas-----	-	-	-	-	-	-	-	-	-	-	6	6
California-----	-	-	-	-	-	-	-	-	-	-	21	97
Colorado-----	-	-	-	-	-	-	-	-	-	-	434	1,934
Illinois-----	-	-	-	-	-	-	-	-	-	-	255	306
Indiana-----	-	-	-	-	-	-	-	-	-	-	2	6
Iowa-----	-	-	-	-	-	-	-	-	-	-	28	28
Kansas-----	-	-	-	-	-	-	-	-	-	-	474	1,930
Kentucky-----	1	1	2	4	3	2	-	3	-	16	1	1
Maryland-----	-	-	-	-	-	-	-	-	-	-	99	99
Missouri-----	-	-	-	-	-	-	-	-	-	-	14	14
Montana-----	-	-	-	-	-	-	-	-	-	-	13	73
New Mexico-----	-	-	-	-	-	-	-	-	-	-	28	28
North Dakota-----	-	-	-	-	-	-	-	-	-	-	215	922
Ohio-----	-	-	-	-	-	-	-	-	-	-	34	242
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	94	2,146
Pennsylvania (bituminous)-----	-	-	1	-	-	-	-	-	-	1	8	40
Pennsylvania (anthracite)-----	-	-	-	-	-	-	-	-	-	-	23	23
Tennessee-----	-	-	-	-	-	-	-	-	-	-	31	246
Texas-----	-	-	-	-	-	-	-	-	-	-	31	682
Utah-----	-	-	-	-	-	-	-	-	-	-	53	53
Virginia-----	-	-	-	2	2	-	-	-	1	5	165	5,598
Washington-----	-	-	-	-	-	-	-	-	-	-	18	18
West Virginia-----	-	-	3	4	3	-	-	6	2	18	52	83
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	-
Total bituminous-----	1	1	6	10	8	2	-	9	3	40	2,173	14,667
Pennsylvania (anthracite)-----	-	1	4	2	2	-	1	2	3	15	152	208
All coal-----	1	2	10	12	10	2	1	11	6	55	2,325	14,875

See footnote at end of table.

TABLE 38. - Number of nondisabled injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1972 - Continued

State	Independent shops and yards									
	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Haulage	Electricity	Machinery	Miscellaneous causes	Total, independent shops and yards
Illinois-----	-	-	-	-	-	3	-	-	1	4
Indiana-----	-	1	-	-	-	4	-	-	2	7
Kentucky-----	1	-	2	1	-	-	-	-	-	4
Missouri-----	1	-	1	1	-	-	-	-	-	4
Ohio-----	1	3	12	9	1	2	1	3	9	41
Pennsylvania (bituminous)-----	-	-	3	-	-	1	-	-	3	7
Virginia-----	1	-	8	11	-	1	-	5	6	32
West Virginia-----	1	8	14	5	-	2	-	5	7	42
Total bituminous-----	4	12	40	27	1	13	1	13	28	139
Pennsylvania (anthracite)-----	1	1	5	3	-	-	1	3	4	18
All coal-----	5	13	45	30	1	13	2	16	32	157

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1972

State	Number of injuries							Distri- bution of all disabling injuries, percent	Frequency rates								
	Fatal	Nonfatal				All dis- abling inju- ries	Non- dis- abling inju- ries		Per million man-hours				Per million tons				
		Permanent	Tempo- rary total	Total non- fatal dis- abling	Total abling				Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	
Underground mines:																	
Underground:																	
Alabama-----	6	-	9	137	146	152	319	1.5	1.17	28.59	29.76	32.70	0.80	19.55	20.35	22.36	
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	7	7	7	7	.1	-	305.04	305.04	-	-	-	412.71	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	5	-	-	178	178	183	251	1.9	2.68	95.49	98.17	36.48	1.68	59.95	61.64	22.90	
Illinois-----	9	-	12	691	703	712	2,066	7.2	.72	56.47	57.19	108.75	.29	22.44	22.73	43.22	
Indiana-----	1	-	-	49	49	50	98	.5	1.82	89.33	91.15	87.50	.74	36.50	37.25	35.76	
Iowa-----	-	-	-	8	8	8	12	.1	-	75.88	75.88	37.94	-	22.63	22.63	11.31	
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	22	-	14	1,081	1,095	1,117	2,402	11.3 (1/)	.88	43.83	44.71	51.43	.44	21.91	22.35	25.71	
Maryland-----	-	-	1	3	4	4	4	(1/)	-	141.24	141.24	-	-	111.88	111.88	-	
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	-	-	-	39	39	39	51	.4	-	113.62	113.62	148.59	-	44.04	44.04	57.60	
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	3	1	6	596	603	606	1,248	6.1	.33	65.85	66.18	70.11	.18	36.44	36.62	38.79	
Oklahoma-----	-	-	-	11	11	11	27	.1	-	127.37	127.37	185.27	-	235.75	235.75	342.91	
Pennsylvania																	
(bituminous)---	16	4	25	1,176	1,205	1,221	3,137	12.4	.51	38.37	38.88	61.02	.33	25.23	25.56	40.11	
Tennessee-----	2	-	1	60	61	63	91	.6	1.32	40.19	41.50	18.45	.56	17.18	17.74	7.89	
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	2	182	184	184	390	1.9	-	89.80	89.80	100.54	-	41.87	41.87	46.88	
Virginia-----	13	-	16	975	991	1,004	1,601	10.2 (1/)	.84	63.67	64.51	38.36	.61	46.39	47.00	27.95	
Washington-----	-	-	-	3	3	3	8	(1/)	-	136.23	136.23	227.06	-	104.45	104.45	174.08	
West Virginia---	44	1	67	4,381	4,449	4,493	9,518	45.5	.68	69.15	69.83	78.10	.45	45.14	45.59	50.99	
Wyoming-----	-	-	-	15	15	15	39	.2	-	114.41	114.41	183.06	-	34.31	34.31	54.89	
Total or average, bituminous--																	
Pennsylvania	121	6	153	9,592	9,751	9,872	21,308	-	.71	57.45	58.17	67.38	.42	33.97	34.39	39.84	
(anthracite)---	1	-	-	72	72	73	125	-	1.29	93.21	94.51	67.32	1.53	110.39	111.93	79.73	
Total or average, underground-																	
	122	6	153	9,664	9,823	9,945	21,433	-	.72	57.61	58.33	67.38	.42	34.14	34.57	39.93	

See footnotes at end of table.

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries					Distri- bution of all disabling injuries, percent	Frequency rates												
	Fatal	Nonfatal			All dis- abling inju- ries		Non- dis- abling inju- ries	All inju- ries	Per million man-hours				Per million tons						
		Permanent	Tempo- rary total	Total non- fatal dis- abling					Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling				
																Total Par- tial			
Underground mines:																			
Surface:																			
Alabama-----	-	-	5	5	5	0.9	-	6.44	6.44	16.73	-	-	-	-	-	-	-	-	-
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	2	-	-	316.51	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	7	7	7	1.3	8	-	21.81	24.93	-	-	-	-	-	-	-	-	-
Illinois-----	-	1	43	44	44	8.0	146	-	28.65	95.07	-	-	-	-	-	-	-	-	-
Indiana-----	-	-	4	4	4	.7	3	-	53.62	40.21	-	-	-	-	-	-	-	-	-
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	3	1	4	82	87	16.3	171	-	34.81	68.43	-	-	-	-	-	-	-	-	-
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	-	-	3	3	3	.5	9	-	46.95	140.85	-	-	-	-	-	-	-	-	-
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	30	30	30	5.4	65	-	30.70	66.52	-	-	-	-	-	-	-	-	-
Oklahoma-----	-	-	3	3	3	.5	2	-	153.70	102.47	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)---	1	-	44	45	46	8.3	136	-	13.28	40.14	-	-	-	-	-	-	-	-	-
Tennessee-----	-	-	2	2	2	.4	4	-	14.95	29.90	-	-	-	-	-	-	-	-	-
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	16	16	16	2.9	30	-	43.75	82.04	-	-	-	-	-	-	-	-	-
Virginia-----	-	-	48	48	48	8.7	54	-	52.84	59.44	-	-	-	-	-	-	-	-	-
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia---	1	-	5	242	247	44.8	408	-	43.73	72.24	-	-	-	-	-	-	-	-	-
Wyoming-----	1	-	6	6	6	1.3	7	-	68.41	79.81	-	-	-	-	-	-	-	-	-
Total or average, bituminous---	6	1	11	535	547	-	1,058	-	32.48	62.83	-	-	-	-	-	-	-	-	-
Pennsylvania (anthracite)---	-	-	-	5	5	-	4	-	23.05	18.44	-	-	-	-	-	-	-	-	-
Total or average, surface-----	6	1	11	540	552	-	1,062	-	32.36	62.26	-	-	-	-	-	-	-	-	-

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries						Distri- bution of all disabling injuries, percent	Frequency rates										
	Fatal	Nonfatal			All dis- abling inju- ries	Non- dis- abling inju- ries		Per million man-hours				Per million tons						
		Permanent	Tempo- rary total	Total non- fatal dis- abling				Fatal	Non- fatal dis- abling	All dis- abling	Non- fatal dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling			
																Total Par- tial		
Underground mines:																		
Deep mines:																		
Alabama-----	6	-	9	142	151	157	180	337	1.5	1.02	25.66	26.68	30.59	0.80	20.22	21.02	24.10	
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Arkansas-----	-	-	-	7	7	7	2	9	.1	-	239.18	239.18	68.34	-	412.71	412.71	117.92	
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Colorado-----	5	-	-	185	185	190	76	266	1.8	2.29	84.66	86.95	34.78	1.68	62.31	63.99	25.60	
Illinois-----	9	-	13	734	747	756	1,500	2,256	7.3	.64	53.41	54.05	107.25	.29	23.84	24.13	47.88	
Indiana-----	1	-	-	53	53	54	51	105	.5	1.60	85.05	86.66	81.84	.74	39.48	40.23	37.99	
Iowa-----	-	-	-	8	8	8	4	12	.1	-	60.39	60.39	30.19	-	22.63	22.63	11.31	
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Kentucky-----	25	1	18	1,163	1,182	1,207	1,456	2,663	11.6	.91	43.01	43.92	52.98	.50	23.65	24.15	29.13	
Maryland-----	-	-	1	3	4	4	-	4	(1/)	-	137.03	137.03	-	-	111.88	111.88	-	
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
New Mexico-----	-	-	-	42	42	42	60	102	.4	-	103.16	103.16	147.37	-	47.43	47.43	67.76	
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ohio-----	3	1	6	626	633	636	707	1,343	6.1	.30	62.46	62.76	69.76	.18	38.25	38.43	42.72	
Oklahoma-----	-	-	-	14	14	14	18	32	.1	-	132.23	132.23	170.01	-	300.04	300.04	385.77	
Pennsylvania																		
(bituminous)---	17	4	26	1,220	1,250	1,267	2,052	3,319	12.2	.49	35.93	36.42	58.98	.36	26.17	26.52	42.96	
Tennessee-----	2	-	1	62	63	65	32	97	.6	1.21	38.14	39.35	19.37	.56	17.74	18.30	9.01	
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Utah-----	-	-	2	198	200	200	236	436	1.9	-	82.83	82.83	97.74	-	45.52	45.52	53.71	
Virginia-----	13	-	16	1,023	1,039	1,052	651	1,703	10.1	.79	63.07	63.86	39.52	.61	48.64	49.25	30.48	
Washington-----	-	-	-	3	3	3	5	8	(1/)	-	113.54	113.54	189.24	-	104.45	104.45	174.08	
West Virginia---	45	1	72	4,623	4,696	4,741	5,433	10,174	45.5	.64	67.10	67.74	77.63	.46	47.65	48.11	55.13	
Wyoming-----	1	-	-	21	21	22	31	53	.2	4.57	95.98	100.55	141.68	2.29	48.03	50.32	70.90	
Total or average, bituminous--	127	7	164	10,127	10,298	10,425	12,494	22,919	-	.68	55.20	55.88	66.97	.44	35.87	36.32	43.52	
Pennsylvania (anthracite)---	1	-	-	77	77	78	56	134	-	1.01	77.83	78.84	56.60	1.53	118.06	119.59	85.86	
Total or average, deep mines---	128	7	164	10,204	10,375	10,503	12,550	23,053	-	.68	55.32	56.00	66.91	.44	36.06	36.50	43.62	

See footnotes at end of table.

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries							Distri- bution of all disabling injuries, percent	Frequency rates								
	Fatal	Nonfatal			All dis- abling inju- ries	Non- dis- abling inju- ries	All inju- ries		Per million man-hours			Per million tons					
		Permanent	Tempo- rary total	Total non- fatal dis- abling					Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	
																	Total Par- tial
Other surface mining: 2/	-	-	2	18	20	20	16	36	40.0	-	25.24	25.24	20.19	-	5.01	5.01	4.01
Kentucky-----	1	-	-	-	-	1	-	1	2.0	9.88	-	9.88	-	1.36	-	1.36	-
Ohio-----																	
Pennsylvania	-	-	-	1	1	1	1	2	2.0	-	8.85	8.85	8.85	-	2.79	2.79	2.79
(bituminous)----	-	-	-	1	1	1	-	1	2.0	-	17.21	17.21	-	-	3.70	3.70	-
Tennessee-----	-	-	-	3	3	3	5	8	6.0	-	15.73	15.73	26.22	-	2.86	2.86	4.76
Virginia-----	-	-	-	24	24	24	18	42	48.0	-	35.94	35.94	26.95	-	10.19	10.19	7.64
West Virginia----																	
Total or average, bituminous----	1	-	2	47	49	50	40	90	-	.51	25.09	25.60	20.48	.11	5.52	5.64	4.51
Pennsylvania (anthracite)----	-	-	-	14	14	14	15	29	-	-	40.26	40.26	43.14	-	6.46	6.46	6.92
Total or average, other surface mining-----																	
1	-	2	61	63	64	55	119	-	-	.43	27.38	27.82	23.91	.09	5.71	5.80	4.98

See footnotes at end of table.

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries					Distri- bution of all disabling injuries, percent	Frequency rates										
	Fatal	Nonfatal			All dis- abling inju- ries		Per million man-hours				Per million tons						
		Permanent	Tempo- rary total	Total non- fatal dis- abling			Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- ab- ling			
															Total Par- tial		
Total surface mining:																	
Alabama-----	3	-	1	69	70	73	97	170	5.9	1.06	24.80	25.86	34.37	0.30	6.94	7.23	9.61
Alaska-----	-	-	-	8	8	8	17	25	.6	-	39.68	39.68	84.33	-	15.99	15.99	33.99
Arizona-----	-	-	2	28	30	30	19	49	2.4	-	83.55	83.55	52.92	-	11.21	11.21	7.10
Arkansas-----	-	-	1	5	6	6	6	12	.5	-	27.27	27.27	27.27	-	15.24	15.24	15.24
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	7	7	7	7	28	.6	-	26.03	26.03	78.09	-	2.89	2.89	8.67
Illinois-----	2	6	169	175	177	177	434	611	14.2	.32	28.07	28.39	69.61	.06	5.56	5.63	13.79
Indiana-----	-	1	73	74	74	74	255	329	5.9	-	17.93	17.93	61.78	-	3.35	3.35	11.54
Iowa-----	-	-	-	7	7	7	2	9	.6	-	46.12	46.12	13.18	-	19.65	19.65	5.61
Kansas-----	-	-	-	19	19	19	19	47	1.5	-	41.04	41.04	60.48	-	15.52	15.52	22.88
Kentucky-----	3	-	4	277	281	284	474	758	22.8	.30	28.31	28.62	47.76	.06	5.32	5.38	8.98
Maryland-----	-	-	-	4	4	4	1	5	.3	-	10.56	10.56	2.64	-	4.61	4.61	1.15
Missouri-----	1	-	-	35	35	36	99	135	2.9	.90	31.55	32.45	89.23	.22	7.86	8.08	22.23
Montana-----	-	-	1	2	3	3	14	17	.2	-	7.89	7.89	36.80	-	.44	.44	2.05
New Mexico-----	2	-	-	12	12	14	13	27	1.1	3.08	18.48	21.56	20.02	.28	1.65	1.93	1.79
North Dakota-----	-	-	2	20	22	22	28	50	1.8	-	41.43	41.43	52.73	-	3.23	3.23	4.11
Ohio-----	5	-	2	79	81	86	215	301	6.9	.70	11.38	12.09	30.22	.16	2.53	2.69	6.72
Oklahoma-----	-	-	-	22	22	22	24	46	1.8	-	28.77	28.77	31.39	-	9.80	9.80	10.69
Pennsylvania																	
(bituminous)-----	-	-	6	135	141	141	94	235	11.3	-	20.38	20.38	13.59	-	7.60	7.60	5.07
Tennessee-----	-	-	-	13	13	13	8	21	1.0	-	13.47	13.47	8.29	-	4.05	4.05	2.49
Texas-----	-	-	-	2	2	2	23	25	.2	-	4.63	4.63	53.23	-	.58	.58	6.70
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia-----	-	-	-	33	33	33	31	64	2.6	-	25.77	25.77	24.21	-	6.35	6.35	5.97
Washington-----	-	-	1	20	21	21	53	74	1.7	-	58.98	58.98	148.86	-	8.05	8.05	20.33
West Virginia-----	2	-	-	149	149	151	165	316	12.1	.39	29.32	29.72	32.47	.13	9.75	9.88	10.79
Wyoming-----	1	-	2	10	12	13	52	65	1.0	.90	10.80	11.70	46.80	.12	1.46	1.58	6.32
Total or average, bituminous-----																	
Pennsylvania (anthracite)-----	19	-	29	1,198	1,227	1,246	2,173	3,419	-	.37	23.67	24.03	41.91	.08	5.09	5.17	9.02
	2	1	1	139	141	143	152	295	-	.67	47.19	47.86	50.87	.34	24.14	24.48	26.02
Total or average, total surface mining-----																	
	21	1	30	1,337	1,368	1,389	2,325	3,714	-	.38	24.95	25.33	42.40	.09	5.54	5.63	9.42

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries						Distri- bution of all disabling injuries, percent	Frequency rates									
	Fatal	Nonfatal			All dis- abling inju- ries	Non- dis- abling inju- ries		All inju- ries	Per million man-hours			Per million tons					
		Permanent		Total non- fatal dis- abling					Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	
		Total	Par- tial														
Total mining:																	
Alabama-----	9	-	10	211	221	230	277	507	2.0	1.03	25.38	26.42	31.82	0.51	12.58	13.10	15.77
Alaska-----	-	-	-	8	8	8	17	25	.1	-	39.68	39.68	84.33	-	15.99	15.99	33.99
Arizona-----	-	-	2	28	30	30	19	49	.3	-	83.55	83.55	52.92	-	11.21	11.21	7.10
Arkansas-----	-	-	1	12	13	13	8	21	.1	-	52.15	52.15	32.09	-	31.66	31.66	19.48
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	5	-	-	192	192	197	97	294	1.7	2.04	78.24	80.28	39.53	.93	35.62	36.55	18.00
Illinois-----	11	-	19	903	922	933	1,934	2,867	8.0	.54	45.60	46.14	95.64	.18	14.68	14.86	30.80
Indiana-----	1	-	1	126	127	128	306	434	1.1	.21	26.73	26.94	64.41	.04	5.42	5.46	13.05
Iowa-----	-	-	-	15	15	15	6	21	.1	-	52.77	52.77	21.11	-	21.13	21.13	8.45
Kansas-----	-	-	-	19	19	19	28	47	.2	-	41.04	41.04	60.48	-	15.52	15.52	22.88
Kentucky-----	28	1	22	1,440	1,463	1,491	1,930	3,421	12.8	.75	39.11	39.86	51.59	.27	14.24	14.51	18.78
Maryland-----	-	-	1	7	8	8	1	9	.1	-	19.61	19.61	2.45	-	8.86	8.86	1.11
Missouri-----	1	-	-	35	35	36	99	135	.3	.90	31.55	32.45	89.23	.22	7.86	8.08	22.23
Montana-----	-	-	1	2	3	3	14	17	(1/)	-	7.82	7.82	36.49	-	.44	.44	2.04
New Mexico-----	2	-	-	54	54	56	73	129	.5	1.89	51.12	53.01	69.11	.25	6.62	6.87	8.95
North Dakota-----	-	-	2	20	22	22	28	50	.2	-	41.43	41.43	52.73	-	3.23	3.23	4.11
Ohio-----	8	1	8	705	714	722	922	1,644	6.2	.46	41.39	41.86	53.45	.16	14.71	14.87	18.99
Oklahoma-----	-	-	-	36	36	36	42	78	.3	-	41.35	41.35	48.25	-	15.70	15.70	18.32
Pennsylvania																	
(bituminous)----	17	4	32	1,355	1,391	1,408	2,146	3,554	12.1	.41	33.35	33.76	51.45	.26	20.97	21.23	32.36
Tennessee-----	2	-	1	75	76	78	40	118	.7	.76	29.05	29.81	15.29	.30	11.24	11.54	5.92
Texas-----	-	-	-	2	2	2	23	25	(1/)	-	4.63	4.63	53.23	-	.58	.58	6.70
Utah-----	-	-	2	198	200	200	236	436	1.7	-	82.83	82.83	97.74	-	45.52	45.52	53.71
Virginia-----	13	-	16	1,056	1,072	1,085	682	1,767	9.3	.73	60.38	61.12	38.42	.49	40.37	40.86	25.68
Washington-----	-	-	1	23	24	24	58	82	.2	-	62.75	62.75	151.65	-	9.10	9.10	22.00
West Virginia-----	47	1	72	4,772	4,845	4,892	5,598	10,490	41.9	.63	64.54	65.17	74.57	.41	42.56	42.97	49.17
Wyoming-----	2	-	2	31	33	35	83	118	.3	1.50	24.81	26.32	62.41	.23	3.81	4.04	9.57
Total or average, bituminous-----																	
Pennsylvania	146	7	193	11,325	11,525	11,671	14,667	26,338	-	.61	48.34	48.95	61.52	.28	21.82	22.10	27.77
(anthracite)----	3	1	1	216	218	221	208	429	-	.75	54.81	55.57	52.30	.46	33.57	34.03	32.03
Total or average, total mining----																	
	149	8	194	11,541	11,743	11,892	14,875	26,767	-	.61	48.45	49.06	61.37	.28	21.97	22.25	27.83

See footnotes at end of table.

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries						Distri- bution of all disabling injuries, percent	Frequency rates											
	Fatal	Nonfatal			All dis- abling inju- ries	Non- dis- abling inju- ries		Per million man-hours											
		Permanent	Tempo- rary total	Total non- fatal dis- abling				Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling					
															Total Par- tial				
Independent shops and yards:																			
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Illinois-----	-	-	2	2	2	2	4	6	4	6	15.72	31.44	15.72	31.44	15.72	31.44	15.72	31.44	15.72
Indiana-----	-	-	7	7	7	7	7	14	7	14	57.75	57.75	57.75	57.75	57.75	57.75	57.75	57.75	57.75
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	-	-	-	-	-	-	4	4	4	4	-	11.57	-	-	-	-	-	-	-
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri-----	-	-	-	-	-	-	2	2	2	2	-	49.57	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	12	12	12	12	41	53	41	53	12.41	42.39	12.41	42.39	12.41	42.39	12.41	42.39	12.41
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-----	-	-	1	1	1	1	7	8	7	8	2.45	17.16	2.45	17.16	2.45	17.16	2.45	17.16	2.45
Tennessee-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia-----	-	-	6	6	6	6	32	38	32	38	14.44	77.01	14.44	77.01	14.44	77.01	14.44	77.01	14.44
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia-----	-	-	1	15	15	15	42	57	42	57	16.66	46.65	16.66	46.65	16.66	46.65	16.66	46.65	16.66
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average, bituminous-----	-	-	1	42	43	43	139	182	139	182	12.93	41.80	12.93	41.80	12.93	41.80	12.93	41.80	12.93
Pennsylvania (anthracite)-----	-	-	-	2	2	2	18	20	18	20	25.67	230.99	25.67	230.99	25.67	230.99	25.67	230.99	25.67
Total or average, independent shops and yards-----	-	-	1	44	45	45	157	202	157	202	13.22	46.13	13.22	46.13	13.22	46.13	13.22	46.13	13.22

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries						Distri- bution of all disabling injuries, percent	Frequency rates							
	Fatal	Nonfatal			All dis- abling inju- ries	Non- dis- abling inju- ries		Per million man-hours							
		Permanent	Tempo- rary total	Total non- fatal dis- abling				Per million man-hours							
								Fatal	Non- fatal dis- abling	All dis- abling	Non- fatal dis- abling				
Mechanical cleaning plants:															
Alabama-----	-	-	12	12	12	21	33	-	22.12	22.12	38.71	-	-	-	-
Alaska-----	-	-	-	-	-	4	4	-	-	-	211.29	-	-	-	-
Arizona-----	-	-	1	1	1	2	3	-	44.47	44.47	88.94	-	-	-	-
Arkansas-----	-	-	1	1	1	-	1	-	117.62	117.62	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	-	-	3	3	-	-	-	57.46	-	-	-	-
Illinois-----	-	1	32	33	33	75	108	-	16.36	16.36	37.18	-	-	-	-
Indiana-----	-	-	5	5	5	14	19	-	10.18	10.18	28.49	-	-	-	-
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	2	2	2	9	11	-	33.08	33.08	148.85	-	-	-	-
Kentucky-----	2	-	51	51	53	70	123	0.64	16.44	17.08	22.56	-	-	-	-
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri-----	-	-	4	4	4	1	5	-	46.38	46.38	11.60	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	-	-	1	1	1	6	7	-	15.03	15.03	90.16	-	-	-	-
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	9	9	9	31	40	-	10.19	10.19	35.11	-	-	-	-
Oklahoma-----	-	-	1	1	1	-	1	-	27.41	27.41	-	-	-	-	-
Pennsylvania (bituminous)-----	2	2	47	49	51	155	206	.57	13.97	14.54	44.19	-	-	-	-
Tennessee-----	-	-	3	3	3	1	4	.7	23.50	23.50	7.83	-	-	-	-
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	4	4	4	12	16	-	19.19	19.19	57.56	-	-	-	-
Virginia-----	2	-	43	43	45	54	99	1.67	35.81	37.48	44.97	-	-	-	-
Washington-----	-	-	3	3	3	3	6	-	60.31	60.31	60.31	-	-	-	-
West Virginia-----	1	-	216	220	221	429	650	.14	31.04	31.18	60.53	-	-	-	-
Wyoming-----	-	-	2	2	2	4	6	-	136.30	136.30	272.61	-	-	-	-
Total or average, bituminous-----	7	-	437	444	451	894	1,345	.36	22.65	23.01	45.60	-	-	-	-
Pennsylvania (anthracite)-----	-	-	96	97	97	164	261	-	44.98	44.98	76.05	-	-	-	-
Total or average, mechanical cleaning plants-----	7	-	533	541	548	1,058	1,606	.32	24.86	25.18	48.62	-	-	-	-

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries							Distri- bution of all disabling injuries, percent	Frequency rates								
	Fatal	Nonfatal				All dis- abling inju- ries	Non- dis- abling inju- ries		Per million man-hours			Per million tons					
		Permanent	Tempo- rary total	Total non- fatal dis- abling	Total dis- abling				Fatal	Non- dis- abling	All dis- abling	Non- fatal dis- abling	Fatal	Non- fatal dis- abling	All dis- abling		
																Total Par- tial	
Grand total:	9	-	10	223	233	242	298	540	2.0	0.97	25.19	26.17	32.22	0.51	13.27	13.78	16.97
Alabama-----	-	-	-	8	8	8	21	29	.1	-	36.28	36.28	95.23	-	15.99	15.99	41.99
Alaska-----	-	-	2	29	31	31	21	52	.3	-	81.25	81.25	55.04	-	11.58	11.58	7.85
Arizona-----	-	-	1	13	14	14	8	22	.1	-	54.31	54.31	31.03	-	34.09	34.09	19.48
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	5	-	-	192	192	197	100	297	1.6	2.00	76.61	78.60	39.90	.93	35.62	36.55	18.55
Colorado-----	11	-	20	937	957	968	2,013	2,981	8.0	.49	42.79	43.28	90.01	.18	15.24	15.42	32.06
Illinois-----	1	-	1	138	139	140	327	467	1.2	.19	25.92	26.10	60.97	.04	5.93	5.97	13.95
Indiana-----	-	-	-	15	15	15	6	21	.1	-	52.01	52.01	20.80	-	21.13	21.13	8.45
Iowa-----	-	-	-	21	21	21	37	58	.2	-	40.12	40.12	70.69	-	17.16	17.16	30.23
Kansas-----	-	-	-	21	21	21	37	58	.2	-	40.12	40.12	70.69	-	17.16	17.16	30.23
Kentucky-----	30	1	22	1,491	1,514	1,544	2,004	3,548	12.7	.73	37.06	37.79	49.05	.29	14.73	15.02	19.50
Maryland-----	-	-	1	7	8	8	1	9	.1	-	19.47	19.47	2.43	-	8.86	8.86	1.11
Missouri-----	1	-	-	39	39	40	102	142	.3	.81	31.55	32.36	82.52	.22	8.76	8.98	22.90
Montana-----	-	-	1	2	3	3	14	17	(1/)	-	7.82	7.82	36.49	-	.44	.44	2.04
New Mexico-----	2	-	55	55	55	57	79	136	.5	1.78	48.98	50.76	70.35	.25	6.74	6.99	9.69
North Dakota-----	-	-	2	20	22	22	28	50	.2	-	40.87	40.87	52.02	-	3.23	3.23	4.11
Ohio-----	8	1	8	726	735	743	994	1,737	6.1	.42	38.48	38.90	52.04	.16	15.14	15.31	20.48
Oklahoma-----	-	-	-	37	37	37	42	79	.3	-	40.79	40.79	46.30	-	16.14	16.14	18.32
Pennsylvania																	
(bituminous)-----	19	4	34	1,403	1,441	1,460	2,308	3,768	12.0	.42	31.59	32.00	50.59	.29	21.73	22.02	34.80
Tennessee-----	2	-	1	78	79	81	41	122	.7	.73	28.79	29.52	14.94	.30	11.69	11.98	6.06
Texas-----	-	-	-	2	2	2	23	25	(1/)	-	4.63	4.63	53.23	-	.58	.58	6.70
Utah-----	-	-	2	202	204	204	248	452	1.7	-	77.77	77.77	94.55	-	46.43	46.43	56.44
Virginia-----	15	-	16	1,105	1,121	1,136	768	1,904	9.3	.77	57.88	58.65	39.65	.56	42.21	42.78	28.92
Washington-----	-	-	1	26	27	27	61	88	.2	-	62.47	62.47	141.13	-	10.24	10.24	23.14
West Virginia-----	48	1	77	5,002	5,080	5,128	6,069	11,197	42.2	.58	61.16	61.74	73.07	.42	44.62	45.05	53.31
Wyoming-----	2	-	2	33	35	37	87	124	.3	1.49	26.03	27.52	64.70	.23	4.04	4.27	10.04
Total or average, bituminous-----	153	7	201	11,804	12,012	12,165	15,700	27,865	-	.59	45.96	46.55	60.08	.29	22.75	23.04	29.73
Pennsylvania (anthracite)-----	3	1	2	314	317	320	390	710	-	.48	51.03	51.52	62.79	.46	48.82	49.28	60.06
Total or average-----	156	8	203	12,118	12,329	12,485	16,090	28,575	-	.58	46.08	46.66	60.14	.29	23.06	23.35	30.10

1/ Less than 0.05.

2/ Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1972 - Continued

Number of injuries										Severity rates					Average severity		
State	Fatal	Nonfatal			All dis-abling in-ju-ries	Non-dis-abling in-ju-ries	All in-ju-ries	Per million man-hours			Per million tons			Perma- nent par- tial	Tempo- rary total	All dis- abling	
		Permanent	Tempo- rary total	Total non- fatal dis- abling				Fatal	Non- fatal dis- abling	All dis- abling	Fatal	Non- fatal dis- abling	All dis- abling				
Underground mines:																	
Deep mines:	6	-	9	142	151	157	180	337	6,118	2,504	8,622	4,820	1,972	6,792	989	41	323
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	7	7	2	9	-	-	-	-	-	-	-	17	17
Arkansas-----	-	-	-	-	-	-	-	-	-	4,066	4,066	-	7,016	7,016	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	5	-	-	185	185	190	76	266	13,729	2,382	16,112	10,104	1,753	11,858	-	28	185
Illinois-----	9	-	13	734	747	756	1,500	2,256	3,861	2,246	6,107	1,724	1,003	2,726	427	35	113
Indiana-----	1	-	-	53	53	54	51	105	9,628	3,152	12,780	4,470	1,463	5,933	-	37	147
Iowa-----	-	-	-	8	8	8	4	12	-	2,204	2,204	-	826	826	-	36	36
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	25	1	18	1,163	1,182	1,207	1,456	2,663	5,458	1,726	7,184	3,002	949	3,951	452	29	164
Maryland-----	-	-	1	3	4	4	-	4	-	13,224	13,224	-	10,796	10,796	300	29	96
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	-	-	-	42	42	42	60	102	-	1,272	1,272	-	585	585	-	12	12
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	3	1	6	626	633	636	707	1,343	1,776	2,436	4,212	1,088	1,492	2,579	912	21	67
Oklahoma-----	-	-	-	14	14	14	18	32	-	1,181	1,181	-	2,679	2,679	-	9	9
Pennsylvania	17	4	26	1,220	1,250	1,267	2,052	3,319	2,932	2,658	5,590	2,135	1,936	4,071	951	36	153
(bituminous)---	2	-	1	62	63	65	32	97	7,265	1,074	8,339	3,379	500	3,879	100	27	212
Tennessee-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	2	198	200	200	236	436	-	4,159	4,159	-	2,286	2,286	1,530	35	50
Virginia-----	13	-	16	1,023	1,039	1,052	651	1,703	4,735	2,287	7,022	3,651	1,763	5,415	592	28	110
Washington-----	-	-	-	3	3	3	5	8	-	2,233	2,233	-	2,054	2,054	-	20	20
West Virginia---	45	1	72	4,623	4,696	4,741	5,433	10,174	3,858	2,459	6,317	2,740	1,746	4,486	483	28	93
Wyoming-----	1	-	-	21	21	22	31	53	27,422	1,910	29,332	13,723	956	14,679	-	20	292
Total or average, bituminous--	127	7	164	10,127	10,298	10,425	12,494	22,919	4,084	2,366	6,450	2,654	1,538	4,192	613	30	115
Pennsylvania (anthracite)---	1	-	-	77	77	78	56	134	6,065	1,787	7,852	9,200	2,711	11,910	-	23	100
Total or average, deep mines---	128	7	164	10,204	10,375	10,503	12,550	23,053	4,095	2,363	6,458	2,669	1,540	4,210	613	29	115

State	Number of injuries				Severity rates							Average severity				
	Fatal	Nonfatal			All dis-abling in-ju-ries	Non-dis-abling in-ju-ries	All dis-abling in-ju-ries	Per million man-hours			Per million tons			Perma- nent par- tial	Tempo- rary total	All dis- abling
		Permanent	Tempo- rary total	Total non- fatal dis- abling				Fatal	Non- fatal dis- abling	All dis- abling	Fatal	Non- fatal dis- abling	All dis- abling			
Strip mines: Alabama----- Alaska----- Arizona----- Arkansas----- California----- Colorado----- Illinois----- Indiana----- Iowa----- Kansas----- Kentucky----- Maryland----- Missouri----- Montana----- New Mexico----- North Dakota----- Ohio----- Oklahoma----- Pennsylvania (bituminous)----- Tennessee----- Texas----- Utah----- Virginia----- Washington----- West Virginia----- Wyoming-----	3 - - - - - 2 - - - - 3 - 1 2 2 - 4 - - - - - - - - 2 2 1	1 - 2 1 - - 6 - - - 2 - - 1 12 20 2 - 6 - - - - - - 1 -														

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries					Severity rates						Average severity					
	Fatal	Nonfatal			All disabling injuries	Non-disabling injuries	All injuries	Per million man-hours			Per million tons			Permanent partial	Temporary total	All disabling	
		Total	Permanent	Tempo- rary total				Total non-fatal disabling	Fatal	Non-fatal disabling	All disabling	Fatal	Non-fatal disabling				All disabling
Other surface mining 1/	-	-	2	18	20	20	16	36	-	1,117	1,117	-	222	222	188	28	44
Kentucky-----	1	-	-	-	-	1	-	1	59,306	-	59,306	8,155	-	8,155	-	-	6,000
Ohio-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)---	-	-	-	1	1	1	1	2	-	239	239	-	75	75	-	27	27
Tennessee-----	-	-	-	1	1	1	-	1	-	17	17	-	4	4	-	1	1
Virginia-----	-	-	-	3	3	3	5	8	-	73	73	-	13	13	-	5	5
West Virginia----	-	-	-	24	24	24	18	42	-	786	786	-	223	223	-	22	22
Total or average, bituminous-----	1	-	2	47	49	50	40	90	3,072	744	3,816	676	164	840	188	23	149
Pennsylvania (anthracite)----	-	-	-	14	14	14	15	29	-	641	641	-	103	103	-	16	16
Total or average, other surface mining-----	1	-	2	61	63	64	55	119	2,608	728	3,336	543	152	695	188	21	120

See footnote at end of table.

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries					Severity rates						Average severity				
	Fatal	Nonfatal			All dis-abling injuries	Non-dis-abling injuries	All injuries	Per million man-hours			Per million tons		Perma- nent par- tial	Tempo- rary total	All dis- abling	
		Permanent	Tempo- rary total	Total non- fatal dis- abling				Fatal	Non-fatal dis- abling	All dis- abling	Fatal	Non-fatal dis- abling				All dis- abling
Total surface mining:																
Alabama-----	3	-	1	69	70	73	97	170	6,377	450	6,828	126	1,910	200	16	264
Alaska-----	-	-	-	8	8	8	17	25	-	526	526	-	212	-	13	13
Arizona-----	-	-	2	28	30	30	19	49	-	1,086	1,086	-	146	46	11	13
Arkansas-----	-	-	1	5	6	6	6	12	-	1,232	1,232	-	688	75	39	45
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	7	7	7	21	28	-	376	376	-	42	-	14	14
Illinois-----	2	-	6	169	175	177	434	611	1,925	837	2,762	381	547	92	28	97
Indiana-----	-	-	1	73	74	74	255	329	-	596	596	-	111	240	30	33
Iowa-----	-	-	-	7	7	7	2	9	-	1,594	1,594	-	679	-	35	35
Kansas-----	-	-	-	19	19	19	28	47	-	659	659	-	249	-	16	16
Kentucky-----	3	-	4	277	281	284	474	758	1,814	1,037	2,851	341	195	919	24	100
Maryland-----	-	-	-	4	4	4	1	5	-	164	164	-	71	-	16	16
Missouri-----	1	-	-	35	35	36	99	135	5,408	841	6,249	1,347	1,557	-	27	193
Montana-----	-	-	1	2	3	3	14	17	-	384	384	-	21	60	43	49
New Mexico-----	2	-	-	12	12	14	13	27	18,484	388	18,872	1,651	35	-	21	875
North Dakota-----	-	-	2	20	22	22	28	50	-	1,345	1,345	-	105	200	16	32
Ohio-----	5	-	2	79	81	86	215	301	4,216	370	4,587	938	82	220	28	379
Oklahoma-----	-	-	-	22	22	22	24	46	-	1,182	1,182	-	403	-	41	41
Pennsylvania (bituminous)-----	-	-	6	135	141	141	94	235	-	728	728	-	271	292	24	36
Tennessee-----	-	-	-	13	13	13	8	21	-	264	264	-	79	-	20	20
Texas-----	-	-	-	2	2	2	23	25	-	23	23	-	3	-	5	5
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia-----	-	-	-	33	33	33	31	64	-	755	755	-	186	-	29	29
Washington-----	-	-	1	20	21	21	53	74	-	758	758	-	104	100	8	13
West Virginia-----	2	-	-	149	149	151	165	316	2,362	787	3,149	785	262	-	27	106
Wyoming-----	1	-	2	10	12	13	52	65	5,400	640	6,040	729	86	288	14	516
Total or average, bituminous-----	19	-	29	1,198	1,227	1,246	2,173	3,419	2,199	724	2,923	473	156	281	25	122
Pennsylvania (anthracite)-----	2	1	1	139	141	143	152	295	4,016	3,446	7,462	2,054	1,762	75	30	156
Total or average, total surface mining-----	21	1	30	1,337	1,368	1,389	2,325	3,714	2,298	873	3,170	510	194	275	25	125

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries					Severity rates						Average severity				
	Fatal	Nonfatal			All dis-abling inju-ries	Non-dis-abling inju-ries	All inju-ries	Per million man-hours			Per million tons		Perma- nent par- tial	Tempo- rary total	All dis- abling	
		Permanent	Tempo- rary total	Total non- fatal dis- abling				Fatal	Non- fatal dis- abling	All dis- abling	Fatal	Non- fatal dis- abling				All dis- abling
Independent shops and yards:																
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Colorado-----	-	2	2	2	4	6	102	102	102	102	6	6	6	6	6	
Illinois-----	-	7	7	7	7	14	553	553	553	553	10	10	10	10	10	
Indiana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Kansas-----	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	
Kentucky-----	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	
Maryland-----	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	
Missouri-----	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ohio-----	-	12	12	12	41	53	221	221	221	221	18	18	18	18	18	
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pennsylvania (bituminous)-----	-	1	1	1	7	8	255	255	255	255	104	104	104	104	104	
Tennessee-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Virginia-----	-	6	6	6	32	38	1,194	1,194	1,194	1,194	83	83	83	83	83	
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
West Virginia-----	-	1	1	1	42	57	1,109	1,109	1,109	1,109	26	26	26	26	26	
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total or average, bituminous-----	-	1	42	43	43	139	182	569	569	569	640	30	30	44	44	
Pennsylvania (anthracite)-----	-	-	2	2	2	18	20	90	90	90	-	4	4	4	4	
Total or average, independent shops and yards-----	-	1	44	45	45	157	202	558	558	558	640	29	29	42	42	

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries					Severity rates					Average severity			
	Fatal	Nonfatal			All dis-abling inju-ries	Non-dis-abling inju-ries	All inju-ries	Per million man-hours			Per million tons			
		Permanent	Tempo-rary total	Total non-fatal dis-abling				Fatal	Non-fatal dis-abling	All dis-abling	Fatal	Non-fatal dis-abling	All dis-abling	
														Total
Mechanical cleaning plants:														
Alabama-----	-	-	12	12	12	21	33	-	492	492	-	-	-	22
Alaska-----	-	-	-	-	-	4	4	-	-	-	-	-	-	-
Arizona-----	-	-	1	1	1	2	3	-	534	-	-	-	12	-
Arkansas-----	-	-	1	1	1	-	1	-	7,528	-	-	-	64	64
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	-	-	3	3	-	-	-	-	-	-	-
Illinois-----	-	1	32	33	33	75	108	-	421	-	-	-	100	23
Indiana-----	-	-	5	5	5	14	19	-	94	-	-	-	9	9
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	2	2	2	9	11	-	232	-	-	-	7	7
Kentucky-----	2	-	51	51	53	70	123	3,867	483	4,351	-	-	29	255
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri-----	-	-	4	4	4	1	5	-	3,885	-	-	-	84	84
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	-	-	1	1	1	6	7	-	90	-	-	-	6	6
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	9	9	9	31	40	-	273	-	-	-	27	27
Oklahoma-----	-	-	1	1	1	-	1	-	1,124	-	-	-	41	41
Pennsylvania														
(bituminous)-----	2	-	47	49	51	155	206	3,421	413	3,834	60	28	264	264
Tennessee-----	-	-	3	3	3	1	4	-	1,214	-	-	52	52	52
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	4	4	4	12	16	-	307	-	-	16	16	16
Virginia-----	2	-	43	43	45	54	99	9,994	1,480	11,474	-	41	306	306
Washington-----	-	-	3	3	3	3	6	-	302	-	-	5	5	5
West Virginia-----	1	-	216	220	221	429	650	847	927	1,773	-	211	26	57
Wyoming-----	-	-	2	2	2	4	6	-	10,427	10,427	-	-	76	76
Total or average, bituminous-----	7	-	437	444	451	894	1,345	2,142	692	2,834	152	29	123	123
Pennsylvania (anthracite)-----	-	-	1	96	97	164	261	-	2,205	2,205	400	45	49	49
Total or average, mechanical cleaning plants-----	7	-	8	533	541	1,058	1,606	1,930	842	2,772	183	32	110	110

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1972 - Continued

State	Number of injuries						Severity rates						Average severity			
	Fatal	Nonfatal			All dis-abling inju-ries	Non-dis-abling inju-ries	All inju-ries	Per million man-hours			Per million tons			Perma- nent par- tial	Tempo- rary total	
		Permanent	Tempo- rary total	Total non- fatal dis- abling				Fatal	Non- fatal dis- abling	All dis- abling	Fatal	Non- fatal dis- abling	All dis- abling			
																Total
Grand total:	9	-	10	223	233	242	298	540	5,839	1,759	7,598	3,075	926	910	32	290
Alabama-----	-	-	-	8	8	8	21	29	-	481	481	-	212	32	13	13
Alaska-----	-	-	-	31	31	31	21	52	-	1,054	1,054	-	150	46	11	13
Arizona-----	-	-	2	13	14	14	8	22	-	1,761	1,761	-	1,106	75	29	32
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	5	-	-	192	192	197	100	297	11,970	2,118	14,088	5,566	985	6,550	28	179
Colorado-----	11	-	20	937	957	968	2,013	2,981	2,951	1,676	4,627	1,051	597	1,648	33	107
Illinois-----	1	-	1	138	139	140	327	467	1,119	846	1,965	356	194	449	31	75
Indiana-----	-	-	-	15	15	15	6	21	-	1,851	1,851	-	752	36	36	36
Iowa-----	-	-	-	21	21	21	37	58	-	609	609	-	261	15	15	15
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	30	1	22	1,491	1,514	1,544	2,904	3,548	4,406	1,450	5,855	1,752	576	2,328	28	155
Louisiana-----	-	-	1	7	8	8	1	9	-	1,090	1,090	-	496	300	21	496
Maryland-----	1	-	-	39	39	40	102	142	4,854	1,026	5,880	1,347	285	1,632	33	182
Massachusetts-----	-	-	1	2	3	3	14	17	-	380	380	-	21	60	43	49
Michigan-----	2	-	55	55	57	57	79	136	10,687	691	11,378	1,472	95	1,567	14	224
Minnesota-----	-	-	2	20	22	22	28	50	-	1,327	1,327	-	105	200	16	32
Mississippi-----	-	-	2	20	22	22	28	50	-	1,454	3,967	989	572	1,561	22	102
Montana-----	8	1	8	726	735	743	994	1,737	2,513	1,454	3,967	989	572	1,561	739	29
Nebraska-----	-	-	-	37	37	37	42	79	-	1,180	1,180	-	467	467	29	29
Nevada-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey-----	19	4	34	1,403	1,441	1,460	2,308	3,768	2,499	2,171	4,670	1,719	1,494	782	35	146
New Mexico-----	2	-	1	78	79	81	41	122	4,373	796	5,169	1,775	323	100	27	175
New York-----	-	-	2	2	2	2	23	25	-	23	23	-	3	5	5	5
North Carolina-----	-	-	2	202	204	204	248	452	-	3,853	3,853	-	2,300	1,530	35	50
North Dakota-----	15	-	16	1,105	1,121	1,136	768	1,904	4,647	2,112	6,758	3,389	1,540	592	28	115
Ohio-----	-	-	-	26	27	27	61	88	-	796	796	-	130	100	9	13
Oklahoma-----	48	1	77	5,002	5,080	5,128	6,969	11,197	3,468	2,211	5,679	2,530	1,613	4,143	28	92
Oregon-----	2	-	2	33	35	37	87	124	8,924	953	9,878	1,384	148	1,532	21	359
Pennsylvania-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (anthracite)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average, bituminous-----	153	7	201	11,804	12,012	12,165	15,700	27,865	3,513	1,892	5,405	1,738	936	2,675	29	116
Total or average, anthracite-----	3	1	2	314	317	320	390	710	2,898	2,709	5,606	2,772	2,591	5,363	33	109
Total or average-----	156	8	203	12,118	12,329	12,485	16,090	28,575	3,498	1,911	5,409	1,751	956	2,707	29	116

1/ Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 41. - Single accidents in which five or more fatalities occurred
at coal mines in the United States, 1963-72

Date	Mine	Location of mine	Cause	Number killed
1963: Apr. 25----- Dec. 16-----	Compass No. 2----- No. 2-----	Dola, W. Va.----- Helper, Utah-----	Explosion----- -----do-----	22 9
1964: No occurrence	-----	-----	-----	-
1965: May 24----- Oct. 16----- Dec. 28-----	No. 2A----- Mars No. 2----- Dutch Creek-----	Robbins, Tenn.----- Wilsonburg, W. Va.----- Redstone, Colo.-----	Explosion----- Mine fire----- Explosion-----	5 7 9
1966: June 1----- July 23-----	Dora No. 2----- Siltex-----	Dora, Pa.----- Mt. Hope, W. Va.-----	Suffocation----- Explosion-----	5 7
1967: No occurrence	-----	-----	-----	-
1968: Aug. 7----- Nov. 20-----	River Queen No. 1- Consol. No. 9-----	Greenville, Ky.----- Farmington, W. Va.-----	Explosion----- -----do-----	9 78
1969: No occurrence	-----	-----	-----	-
1970: Dec. 30-----	Nos. 15 and 16-----	Hyden, Ky.-----	Explosion-----	38
1971: No occurrence	-----	-----	-----	-
1972: July 22----- Dec. 16-----	Blacksville No. 1- Itmann No. 3-----	Blacksville, W. Va.----- Itmann, W. Va.-----	Mine Fire----- Explosion-----	9 5

TABLE 42. - Injury experience and worktime data on officeworkers at coal mines in the United States, by State, 1972

State	Injuries				Frequency rates per million man-hours				Severity rates per million man-hours			Average men working daily	Man-hours worked
	Fatal	Nonfatal disabling	All disabling	Non-disabling	Fatal	Nonfatal disabling	All disabling	Non-disabling	Fatal	Nonfatal disabling	All disabling		
Alabama -----	-	-	-	-	-	-	-	-	-	-	-	165	273,589
Alaska -----	-	-	-	-	-	-	-	-	-	-	-	2	4,313
Arizona -----	-	-	-	-	-	-	-	-	-	-	-	9	13,850
Arkansas -----	-	-	-	-	-	-	-	-	-	-	-	6	7,452
California -----	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado -----	1	-	1	1	-	9.88	9.88	9.88	-	1,156	1,156	53	101,201
Illinois -----	-	-	-	4	-	-	-	5.01	-	-	-	364	798,323
Indiana -----	-	-	-	1	-	-	-	3.08	-	-	-	186	324,396
Iowa -----	-	-	-	-	-	-	-	-	-	-	-	7	12,031
Kansas -----	-	-	-	-	-	-	-	-	-	-	-	2	4,942
Kentucky -----	1	-	1	3	-	.82	.82	2.46	-	3	3	811	1,217,507
Maryland -----	-	-	-	-	-	-	-	-	-	-	-	8	8,432
Missouri -----	-	-	-	1	-	-	-	8.53	-	-	-	52	117,243
Montana -----	-	-	-	-	-	-	-	-	-	-	-	13	18,562
New Mexico -----	-	-	-	-	-	-	-	-	-	-	-	52	113,386
North Dakota -----	-	-	-	-	-	-	-	-	-	-	-	26	57,654
Ohio -----	-	-	-	4	-	-	-	3.99	-	-	-	642	1,001,473
Oklahoma -----	-	-	-	-	-	-	-	-	-	-	-	37	43,181
Pennsylvania (bituminous) -----	-	-	-	3	-	-	-	3.00	-	-	-	739	995,266
Tennessee -----	-	-	-	-	-	-	-	-	-	-	-	49	63,868
Texas -----	-	-	-	1	-	-	-	18.28	-	-	-	24	54,690
Utah -----	-	-	-	2	-	-	-	14.97	-	-	-	73	135,645
Virginia -----	-	-	-	2	-	-	-	12.25	-	-	-	154	163,201
Washington -----	-	-	-	1	-	-	-	9.22	-	-	-	55	108,408
West Virginia -----	4	-	4	8	-	.07	2.07	4.94	-	21	21	1,184	1,761,077
Wyoming -----	-	-	-	-	-	-	-	-	-	-	-	43	62,715
Total or average bituminous -----	-	6	6	31	-	.80	.80	4.15	-	21	21	4,761	7,464,505
Pennsylvania (anthracite) -----	-	-	-	2	-	-	-	8.87	-	-	-	165	225,428
Total or average, all mines -----	-	6	6	33	-	.78	.78	4.00	-	21	21	4,926	7,689,933

TABLE 43. - Injuries, distribution, average severity by degree, and injury rates for officeworkers at bituminous coal mines in the United States, by part of body injured and nature of injury, 1972

Part of body injured	Number of injuries							Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity				
	Fatal	Nonfatal disabling							All disabling injuries	Non-fatal disabling injuries	All disabling injuries	Fatal	Non-fatal disabling	All disabling	Fatal	Non-fatal disabling	All disabling	Permanent partial	Temporary total	All disabling
		Permanent	Temporary total	All non-fatal disabling	All disabling injuries	Non-fatal disabling injuries	All disabling injuries													
-	-	-	-	1	1	1	1	2	16.7	-	0.13	0.13	-	2	2	-	-	17	17	
-	-	-	-	-	-	-	-	4	4	-	-	.54	-	-	-	-	-	-	-	
-	-	-	3	3	3	3	3	6	50.0	-	.40	.40	-	18	18	-	-	46	46	
-	-	-	-	-	-	-	-	3	-	-	-	.40	-	-	-	-	-	-	-	
-	-	-	1	1	1	1	1	12	16.7	-	.13	.13	-	(1/)	(1/)	-	-	1	1	
-	-	-	1	1	1	1	1	4	16.7	-	.13	.13	-	(1/)	(1/)	-	-	2	2	
-	-	-	-	-	-	-	-	4	-	-	-	.54	-	-	-	-	-	2	2	
-	-	-	-	-	-	-	-	1	-	-	-	.13	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	1	-	-	-	.13	-	-	-	-	-	-	-	
Total or average, office-----	-	-	6	6	6	6	37	31	-	-	.80	4.15	-	21	21	-	-	26	26	
Nature of injury																				
-	-	-	3	3	3	3	10	7	50.0	-	.40	.40	-	5	5	-	-	12	12	
-	-	-	-	-	-	-	8	8	-	-	-	.94	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	1	1	-	-	-	1.07	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	2	2	-	-	-	.13	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	1	1	-	-	-	.27	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	6	6	-	-	-	.13	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	2	2	-	-	-	.80	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	2	2	-	-	-	.27	-	-	-	-	-	-	-	
-	-	-	2	2	2	2	5	3	33.3	-	.27	.40	-	16	16	-	-	60	60	
-	-	-	1	1	1	1	2	1	16.7	-	.13	.13	-	(1/)	(1/)	-	-	2	2	
-	-	-	6	6	6	6	37	31	-	-	.80	4.15	-	21	21	-	-	26	26	
Total or average, office-----																				

1/ Less than 0.5.

TABLE 46. - Number and average severity of injuries by degree for officeworkers at bituminous coal mines in the United States, by principal cause of injury, 1972

Officeworkers only, principal cause of injury	Injuries						Average severity			
	Fatal	Nonfatal disabling			All disabling	Non- disabling	All injuries	Permanent partial	Temporary total	All disabling
		Permanent	Temporary total	All nonfatal disabling						
Total	Partial									
Sliding or falling material or objects-----	-	-	1	1	1	3	4	-	17	17
Slips or falls of persons-----	-	-	1	1	1	8	9	-	17	17
Handling material-----	-	-	3	3	3	9	12	-	40	40
Handtools-----	-	-	-	-	-	5	5	-	-	-
Striking or bumping against objects-----	-	-	-	-	-	1	1	-	-	-
Miscellaneous causes-----	-	-	1	1	1	5	6	-	4	4
Total or average-----	-	-	6	6	6	31	37	-	26	26

TABLE 47. - Number and average severity of injuries by degree for officeworkers at Pennsylvania anthracite mines in the United States, by principal cause of injury, 1972

Officeworkers only, principal cause of injury	Injuries							Average severity				
	Fatal	Nonfatal disabling				All disabling	Non- disabling	All injuries	Permanent partial	Temporary total	All disabling	
		Permanent	Total		Temporary total							All nonfatal disabling
			Total	Partial								
Sliding or falling material or objects-----	-	-	-	-	-	-	-	-	-	-	-	
Slips or falls of persons-----	-	-	-	-	-	-	-	-	-	-	-	
Handling material-----	-	-	-	-	-	-	-	-	-	-	-	
Handtools-----	-	-	-	-	-	2	2	2	-	-	-	
Striking or bumping against objects-----	-	-	-	-	-	-	-	-	-	-	-	
Miscellaneous causes-----	-	-	-	-	-	-	-	-	-	-	-	
Total or average-----	-	-	-	-	-	2	2	-	-	-	-	

TABLE 48. - Injury experience and worktime data for all work locations combined (includes officeworkers) at coal mines in the United States, by State, 1972

State	Injuries				Frequency rates per million man-hours				Severity rates per million man-hours			Average men working daily	Man-hours worked
	Fatal	Nonfatal disabling	All disabling	Non-disabling	Fatal	Nonfatal disabling	All disabling	Non-disabling	Fatal	Nonfatal disabling	All disabling		
Alabama-----	9	233	242	298	0.95	24.47	25.41	31.29	5,671	1,709	7,379	5,656	9,522,423
Alaska-----	-	8	8	21	-	35.58	35.58	93.40	-	471	471	97	224,837
Arizona-----	-	31	31	21	-	78.40	78.40	53.11	-	1,017	1,017	212	395,397
Arkansas-----	-	14	14	8	-	52.78	52.78	50.16	-	1,712	1,712	169	265,247
California-----	5	192	198	-	1.92	74.02	75.94	38.74	11,506	2,080	13,586	1,416	2,607,436
Colorado-----	11	957	968	101	.97	41.32	41.39	87.08	2,849	1,619	4,468	11,172	23,163,378
Illinois-----	1	139	140	358	.48	24.44	24.44	16.97	1,055	1,778	2,833	2,953	5,168,544
Indiana-----	-	15	15	6	-	49.93	49.93	16.97	-	1,607	1,607	242	500,446
Iowa-----	-	21	21	37	-	39.76	39.76	70.02	-	607	607	242	526,432
Kansas-----	30	1,515	1,545	2,007	.71	36.01	36.72	47.70	4,278	1,408	5,686	27,926	42,019,319
Kentucky-----	-	8	8	1	-	19.07	19.07	2.38	-	1,068	1,068	263	419,458
Maryland-----	1	39	40	103	.74	28.82	29.56	76.11	4,434	937	5,370	697	1,353,325
Massachusetts-----	-	3	3	14	-	7.46	7.46	34.80	-	363	363	226	402,275
Montana-----	2	55	57	79	1.62	44.49	46.11	63.90	9,707	628	10,334	635	1,236,282
New Mexico-----	-	22	22	28	-	36.92	36.92	46.99	-	1,198	1,198	304	595,886
North Dakota-----	8	735	743	998	.40	36.57	36.96	49.65	2,388	1,382	3,770	12,829	20,101,028
Ohio-----	-	37	37	42	-	38.94	38.94	44.20	-	1,126	1,126	578	950,213
Oklahoma-----	19	1,441	1,460	2,311	.41	30.91	31.32	49.57	2,445	2,125	4,570	25,713	46,622,016
Pennsylvania (bituminous)-----	2	79	81	41	.71	28.13	28.85	14.60	4,273	778	5,051	1,915	2,808,089
Tennessee-----	-	2	2	24	-	4.11	4.11	49.31	-	21	21	219	486,746
Texas-----	-	204	204	250	-	74.00	74.00	90.69	-	3,666	3,666	1,661	2,756,709
Utah-----	15	1,121	1,136	770	.77	57.39	58.16	39.42	4,608	2,094	6,702	13,945	19,532,481
Virginia-----	-	27	27	62	-	49.94	49.94	114.68	-	636	636	267	540,627
West Virginia-----	48	5,084	5,132	6,077	.57	59.94	60.51	71.65	3,396	2,166	5,562	51,951	84,816,597
Wyoming-----	2	35	37	87	1.42	24.87	26.29	61.82	8,527	911	9,438	828	1,407,342
Total or average, bituminous-----	153	12,018	12,171	15,751	.57	44.71	45.28	58.52	3,415	1,840	5,255	162,066	268,802,713
Pennsylvania (anthracite)-----	3	317	320	392	.47	49.25	49.71	60.90	2,796	2,614	5,410	5,087	6,437,045
Grand total-----	156	12,335	12,491	16,123	.57	44.82	45.38	58.58	3,401	1,858	5,259	167,133	275,239,758

TABLE 49. - Injuries, worktime, production, and productivity data at bituminous coal mines in the United States, 1930-72

Year	Number of injuries			Frequency rates						Average severity, all disabling injuries	Average men working daily	Average days worked (thousands)	Man-hours worked (thousands) $\frac{1}{2}$	Production, short tons (thousands)
	Per million man-hours			Per million tons			Severity rates per million man-hours							
	Fatal	Non-fatal disabling	Non-fatal disabling	Fatal	Non-fatal disabling	Non-fatal disabling	Fatal	Non-fatal disabling						
1930-----	1,619	71,217	NA	1.90	83.75	NA	3.46	152.33	NA	NA	493,202	92,326	850,359	467,526
1931-----	1,080	53,975	NA	1.60	75.98	NA	2.83	141.26	NA	NA	450,274	163	73,349	382,105
1932-----	936	39,352	NA	1.77	72.58	NA	3.09	127.06	NA	NA	406,380	146	59,260	309,710
1933-----	823	43,946	NA	1.31	68.87	NA	2.50	131.72	NA	NA	418,732	167	69,882	333,631
1934-----	958	46,982	NA	1.41	69.37	NA	2.67	130.74	NA	NA	438,044	178	81,648	359,368
1935-----	968	57,329	NA	1.46	71.47	NA	2.60	127.64	NA	NA	482,354	178	82,292	372,369
1936-----	1,088	50,314	NA	1.43	63.62	NA	2.60	127.64	NA	NA	482,354	197	95,262	436,468
1937-----	1,190	52,314	NA	1.52	65.05	NA	2.68	113.73	NA	NA	490,771	196	96,130	447,047
1938-----	1,807	32,794	NA	1.52	63.67	NA	2.52	102.51	NA	NA	445,044	191	71,747	349,548
1939-----	867	38,544	NA	1.36	60.52	NA	2.19	97.18	NA	NA	445,044	191	71,747	349,548
1940-----	1,204	43,994	NA	1.68	61.28	NA	2.61	95.37	NA	NA	445,044	201	98,771	396,631
1941-----	1,072	46,637	NA	1.35	58.93	NA	2.08	90.42	NA	NA	445,044	201	98,771	396,631
1942-----	1,265	53,193	NA	1.41	60.21	NA	2.14	91.44	NA	NA	445,044	214	108,000	411,769
1943-----	1,225	51,067	NA	1.39	57.79	NA	2.06	86.05	NA	NA	445,044	214	108,000	411,769
1944-----	1,124	51,253	NA	1.23	56.02	NA	1.81	82.49	NA	NA	445,044	214	108,000	411,769
1945-----	925	46,194	NA	1.13	56.52	NA	1.60	80.12	NA	NA	445,044	214	108,000	411,769
1946-----	795	42,817	NA	1.09	58.81	NA	1.49	80.25	NA	NA	445,044	214	108,000	411,769
1947-----	985	46,025	NA	1.23	57.32	NA	1.57	73.28	NA	NA	445,044	214	108,000	411,769
1948-----	862	42,078	NA	1.15	56.28	NA	1.45	70.97	NA	NA	445,044	214	108,000	411,769
1949-----	494	27,548	NA	0.93	31.67	NA	0.87	34.52	NA	NA	445,044	214	108,000	411,769
1950-----	550	28,390	NA	0.92	47.73	NA	1.06	54.82	NA	NA	445,044	214	108,000	411,769
1951-----	684	28,081	NA	1.16	47.56	NA	1.28	52.67	NA	NA	445,044	214	108,000	411,769
1952-----	449	23,719	NA	0.90	43.74	NA	0.96	50.53	NA	NA	445,044	214	108,000	411,769
1953-----	397	20,112	NA	0.89	45.26	NA	0.87	44.12	NA	NA	445,044	214	108,000	411,769
1954-----	334	14,746	NA	0.99	43.66	NA	0.85	37.62	NA	NA	445,044	214	108,000	411,769
1955-----	360	15,966	NA	0.96	42.76	NA	0.78	34.52	NA	NA	445,044	214	108,000	411,769
1956-----	392	16,486	NA	1.02	42.99	NA	0.79	33.22	NA	NA	445,044	214	108,000	411,769
1957-----	427	15,915	NA	1.17	43.74	NA	0.87	32.53	NA	NA	445,044	214	108,000	411,769
1958-----	326	12,036	NA	1.14	41.97	NA	0.79	29.29	NA	NA	445,044	214	108,000	411,769
1959-----	246	10,440	NA	0.92	39.15	NA	0.60	25.33	NA	NA	445,044	214	108,000	411,769
1960-----	290	10,501	NA	1.13	40.85	NA	0.70	25.24	NA	NA	445,044	214	108,000	411,769
1961-----	275	9,902	NA	1.18	42.52	NA	0.68	24.56	NA	NA	445,044	214	108,000	411,769
1962-----	263	9,783	NA	1.15	42.86	NA	0.62	23.14	NA	NA	445,044	214	108,000	411,769
1963-----	252	9,838	NA	1.09	42.38	NA	0.55	21.37	NA	NA	445,044	214	108,000	411,769
1964-----	218	9,728	NA	0.94	41.92	NA	0.45	19.63	NA	NA	445,044	214	108,000	411,769
1965-----	231	10,071	NA	1.08	43.30	NA	0.49	18.06	NA	NA	445,044	214	108,000	411,769
1966-----	227	9,617	NA	0.99	41.86	NA	0.43	18.06	NA	NA	445,044	214	108,000	411,769
1967-----	213	9,306	NA	0.93	41.44	NA	0.39	17.33	NA	NA	445,044	214	108,000	411,769
1968-----	307	9,135	NA	1.37	40.89	NA	0.57	16.86	NA	NA	445,044	214	108,000	411,769
1969-----	190	9,425	NA	0.84	41.44	NA	0.34	16.86	NA	NA	445,044	214	108,000	411,769
1970-----	235	11,049	NA	1.02	44.21	NA	0.43	18.42	NA	NA	445,044	214	108,000	411,769
1971-----	156	11,363	NA	0.72	46.41	NA	0.32	20.51	NA	NA	445,044	214	108,000	411,769
1972-----	153	12,012	15,700	0.59	45.96	60.08	0.29	22.75	29.73	116	157,285	NA	261,338	528,093

$\frac{1}{2}$ Man-hours of exposure were reported by coal producers for the first time in 1930; from 1930 through 1944, these hours represented worktime or face-time only for underground employees. Since portal-to-portal hours were reported from 1945 on, the face-time hours reported from 1930 through 1944 were converted to portal-to-portal hours--See Bulletin 509, "Injury Experience in Coal Mining, 1948", page 5, for method used.

NA Not available.

TABLE 50. - Injury, worktime, production, and productivity data at Pennsylvania anthracite mines, 1930-72

Year	Number of injuries			Frequency rates						Severity rate- per million man-hours	Average severity, all dis- abling injuries	Average men working daily	Average days active	Man-days worked (thousands)	Man-hours worked (thousands)	Production, short tons (thousands)
				Per million man-hours		Per million tons										
	Fatal	Non- fatal dis- abling	Fatal	Non- fatal dis- abling	Fatal	Non- fatal dis- abling	Fatal	Non- fatal dis- abling								
1930-----	444	28,764	NA	1.76	113.90	6.40	414.56	NA	NA	150,804	209	31,568	252,543	69,385		
1931-----	383	23,983	NA	1.84	115.07	6.42	402.09	NA	NA	139,431	186	25,915	208,415	59,646		
1932-----	249	16,931	NA	1.59	107.88	4.99	339.60	NA	NA	121,243	161	19,486	156,944	49,855		
1933-----	231	15,183	NA	1.49	96.11	4.66	306.47	NA	NA	104,430	185	19,344	154,723	49,541		
1934-----	268	18,577	NA	1.50	104.15	4.69	324.95	NA	NA	108,382	206	22,292	178,372	57,168		
1935-----	274	15,897	NA	1.78	103.16	5.24	304.17	NA	NA	102,848	187	19,280	154,096	52,263		
1936-----	244	17,026	NA	1.56	108.80	4.46	311.43	NA	NA	102,082	192	19,630	156,486	54,670		
1937-----	215	13,412	NA	1.57	98.72	4.15	259.19	NA	NA	99,085	189	18,741	135,854	51,745		
1938-----	225	12,842	NA	1.94	110.85	4.88	278.27	NA	NA	96,282	172	16,528	115,852	46,149		
1939-----	211	13,229	NA	1.71	107.37	4.11	257.65	NA	NA	94,331	186	17,524	123,211	51,346		
1940-----	184	13,782	NA	1.50	112.55	3.57	267.67	NA	NA	94,420	169	17,468	122,447	51,489		
1941-----	194	14,420	NA	1.49	110.83	3.58	266.47	NA	NA	88,948	207	18,444	130,107	54,115		
1942-----	226	13,551	NA	1.64	98.73	3.88	232.89	NA	NA	84,064	239	19,644	137,560	58,316		
1943-----	226	13,527	NA	1.50	89.66	3.80	227.32	NA	NA	79,381	289	21,385	150,832	59,506		
1944-----	174	12,438	NA	1.06	76.05	2.74	195.59	6,353	1,776	72,224	268	18,997	141,235	54,892		
1945-----	173	12,533	NA	1.11	82.02	2.60	197.30	6,845	1,916	72,504	268	19,569	141,235	54,892		
1946-----	173	11,635	NA	1.14	79.61	3.03	203.67	7,086	2,132	78,511	257	20,997	151,633	60,456		
1947-----	137	11,394	NA	1.81	75.69	2.40	199.62	NA	NA	77,955	114	20,508	146,523	57,128		
1948-----	91	7,857	NA	.83	71.88	2.11	181.87	5,460	2,685	75,875	106	20,508	150,565	57,080		
1949-----	93	8,874	NA	.80	76.14	2.09	199.75	4,995	2,388	74,616	196	14,885	109,310	43,201		
1950-----	101	7,472	NA	.95	69.94	2.44	178.63	4,787	2,495	69,767	207	14,567	116,554	44,426		
1951-----	99	6,355	NA	1.03	66.35	2.44	136.55	6,201	2,787	62,410	237	12,975	95,784	40,595		
1952-----	64	4,146	NA	.93	59.85	2.10	135.85	5,543	2,064	55,701	169	9,394	69,273	30,518		
1953-----	62	2,972	NA	1.23	59.18	2.14	102.72	7,407	2,664	41,786	164	6,832	50,223	28,933		
1954-----	60	2,919	NA	1.30	63.46	2.07	100.54	7,827	2,423	34,550	182	6,285	45,995	28,948		
1955-----	56	3,330	NA	1.12	66.31	1.74	103.36	6,691	2,818	32,507	212	6,893	50,220	32,216		
1956-----	51	2,877	NA	1.15	64.93	2.00	112.69	6,906	2,420	30,825	196	6,057	44,311	25,530		
1957-----	32	2,124	NA	.90	59.88	1.51	99.90	5,413	2,303	26,540	183	4,861	35,471	20,496		
1958-----	47	1,723	NA	1.60	58.66	2.29	84.07	9,601	2,081	23,294	173	4,036	29,371	20,496		
1959-----	35	1,401	NA	1.43	57.30	1.85	73.98	8,588	1,897	19,051	176	3,360	24,452	18,938		
1960-----	19	1,295	NA	1.26	56.14	1.09	73.97	5,584	2,618	14,010	156	2,853	22,424	17,507		
1961-----	26	1,161	NA	1.52	61.53	1.52	67.76	7,544	1,877	13,498	204	2,853	20,680	17,133		
1962-----	32	1,295	NA	1.37	76.74	1.74	70.60	9,122	3,245	13,144	216	2,912	21,068	18,344		
1963-----	24	1,362	NA	1.18	65.69	1.37	76.74	7,070	2,580	11,132	214	2,812	20,366	17,487		
1964-----	8	1,067	NA	.49	65.16	.54	71.57	2,931	2,004	11,132	204	2,812	16,375	14,909		
1965-----	6	829	NA	.44	60.64	.46	64.24	2,633	1,844	9,292	203	1,983	13,672	12,905		
1966-----	9	609	NA	.73	49.77	.73	49.67	2,633	1,844	7,950	219	1,701	12,359	11,571		
1967-----	4	304	NA	.36	45.77	.35	44.86	2,160	1,142	6,932	217	1,508	10,073	10,251		
1968-----	13	503	NA	1.27	47.86	1.27	47.86	2,931	1,347	5,027	232	1,337	10,073	10,251		
1969-----	5	553	NA	.54	59.37	.54	63.36	3,221	1,693	5,027	250	1,259	9,315	8,727		
1970-----	3	317	390	.48	51.03	.46	48.82	2,898	2,709	4,922	NA	NA	6,412	6,493		

NA Not available.

TABLE 31. - Injury, worktime, production, and productivity data at all coal mines in the United States, 1930-72

Year	Number of injuries		Frequency rates						Average severity, all disabling injuries	Average men working daily	Average days active	Man-days worked (thousands)	Man-hours worked (thousands) 1/	Production, short tons (thousands)
			Per million man-hours			Per million tons								
	Fatal	Non-fatal disabling	Non-fatal disabling	Fatal	Non-fatal disabling	Fatal	Non-fatal disabling	Fatal						
1930-----	2,053	99,981	NA	1.87	90.65	NA	3.84	186.22	NA	NA	182	123,894	1,102,902	536,911
1931-----	1,643	77,958	NA	1.66	88.26	NA	3.31	176.47	NA	NA	168	99,264	883,286	441,751
1932-----	1,207	56,283	NA	1.73	80.50	NA	3.36	156.53	NA	NA	149	78,745	699,125	359,365
1933-----	1,064	59,129	NA	1.34	74.58	NA	2.78	154.31	NA	NA	171	89,226	792,847	383,172
1934-----	1,226	63,559	NA	1.43	76.63	NA	2.94	157.39	NA	NA	184	103,940	855,487	416,536
1935-----	1,242	63,426	NA	1.52	77.43	NA	2.92	149.37	NA	NA	180	101,572	819,143	424,632
1936-----	1,342	67,340	NA	1.45	72.91	NA	2.73	137.52	NA	NA	197	114,891	926,305	491,139
1937-----	1,413	66,259	NA	1.55	72.62	NA	2.83	132.84	NA	NA	195	114,871	912,435	498,793
1938-----	1,105	49,636	NA	1.59	71.36	NA	2.79	125.44	NA	NA	163	88,276	695,599	393,697
1939-----	1,078	51,773	NA	1.42	68.12	NA	2.41	115.57	NA	NA	179	96,490	760,039	447,977
1940-----	1,368	57,776	NA	1.65	68.75	NA	2.71	112.67	NA	NA	199	106,239	840,416	512,808
1941-----	1,266	61,057	NA	1.37	66.26	NA	2.22	107.14	NA	NA	213	116,444	921,536	569,884
1942-----	1,271	66,774	NA	1.44	65.40	NA	2.30	104.33	NA	NA	243	129,136	1,021,078	640,021
1943-----	1,451	64,594	NA	1.40	62.44	NA	2.22	98.92	NA	NA	264	128,297	1,034,541	652,977
1944-----	1,298	67,691	NA	1.20	59.06	NA	1.90	92.99	7,221	1,555	259	113,424	938,591	631,523
1945-----	1,068	57,117	NA	1.11	59.58	NA	1.69	90.44	6,603	2,466	224	103,847	879,628	593,976
1946-----	968	55,350	NA	1.10	62.92	NA	1.63	93.19	6,603	2,466	239	117,312	949,539	685,162
1947-----	1,158	57,860	NA	1.22	60.72	NA	1.69	84.16	6,673	2,686	227	115,083	898,231	650,003
1948-----	999	53,472	NA	1.11	59.53	NA	1.54	82.26	5,463	3,087	170	82,437	642,476	478,920
1949-----	585	35,405	NA	.91	55.11	NA	1.22	73.93	5,423	3,087	189	91,231	711,390	562,305
1950-----	643	37,264	NA	.90	52.38	NA	1.14	66.27	5,423	3,049	202	89,365	697,247	574,960
1951-----	785	35,553	NA	1.13	50.99	NA	1.37	61.84	4,755	2,896	189	76,003	593,698	509,967
1952-----	546	30,074	NA	.92	50.66	NA	1.07	58.97	5,538	2,896	187	65,688	513,594	486,404
1953-----	461	24,556	NA	.90	47.23	NA	.95	49.87	5,386	2,598	175	49,598	387,950	420,885
1954-----	396	17,718	NA	1.02	45.67	NA	.84	42.10	6,009	2,401	206	53,591	431,379	491,468
1955-----	420	18,885	NA	1.00	45.03	NA	.85	36.43	6,198	2,468	212	55,286	433,662	528,447
1956-----	448	19,816	NA	1.03	45.69	NA	.85	37.40	6,198	2,468	212	55,286	433,662	528,447
1957-----	478	18,792	NA	1.17	46.04	NA	.93	36.51	7,026	2,768	204	52,077	408,207	514,706
1958-----	358	14,160	NA	1.11	43.94	NA	.83	32.76	6,666	2,768	183	49,121	392,279	432,196
1959-----	293	12,163	NA	.99	41.09	NA	.68	28.12	5,939	2,409	186	37,773	296,031	434,574
1960-----	325	11,902	NA	1.15	42.28	NA	.75	27.36	6,926	2,449	189	35,778	281,528	435,036
1961-----	294	11,197	NA	1.15	43.86	NA	.70	26.61	6,910	2,686	194	32,551	255,296	420,729
1962-----	289	10,944	NA	1.16	43.96	NA	.66	24.87	6,965	2,722	197	31,716	248,946	430,772
1963-----	284	11,131	NA	1.12	43.97	NA	.59	23.26	6,730	2,398	202	32,200	253,185	478,629
1964-----	242	11,070	NA	.96	44.73	NA	.48	21.90	5,753	2,668	212	32,012	252,405	505,573
1965-----	259	11,138	NA	1.04	44.73	NA	.48	21.90	6,241	2,718	212	31,513	248,988	527,493
1966-----	233	10,445	NA	.96	42.83	NA	.43	19.15	5,735	1,973	212	30,811	243,759	545,464
1967-----	222	10,115	NA	.92	41.84	NA	.40	18.04	5,509	2,190	220	30,611	241,774	560,764
1968-----	311	9,639	NA	1.33	41.12	NA	.36	17.42	7,960	2,553	221	29,651	234,417	553,340
1969-----	203	9,917	NA	.85	41.76	NA	.36	17.42	5,129	2,230	225	30,053	237,484	569,182
1970-----	260	11,552	NA	1.00	44.40	NA	.43	18.94	5,996	2,312	226	32,814	260,169	609,803
1971-----	181	11,916	NA	.71	46.49	NA	.32	18.94	4,273	1,844	226	32,059	257,135	582,240
1972-----	156	12,320	16,090	.58	46.03	60.14	.29	23.06	1,140	1,911	NA	NA	294,155	643,586

1/ All man-hours are shown on a portal-to-portal basis.

NA Not available.

TABLE 52. - Coal mine fatality rates for the United States, 1870-1972 ^{1/}
(Includes underground and surface injuries)

Year	Bituminous coal mines			Anthracite mines			Total		
	Per thousand employed	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Per million tons mined
1870-----	-	-	-	5.93	-	13.47	5.93	-	13.47
1871-----	-	-	-	5.60	-	10.86	5.60	-	10.86
1872-----	-	-	-	4.98	-	9.20	4.98	-	9.20
1873-----	-	-	-	5.46	-	10.06	5.46	-	10.06
1874-----	2.11	-	8.88	4.33	-	9.31	3.87	-	9.26
1875-----	1.60	-	4.93	3.37	-	10.50	3.06	-	9.51
Average-----	-	-	-	4.58	-	9.94	4.30	-	9.72
1876-----	1.00	-	4.29	3.22	-	9.96	2.83	-	9.20
1877-----	2.17	-	5.90	2.90	-	7.56	2.77	-	7.28
1878-----	1.86	-	3.17	2.92	-	8.62	2.62	-	6.38
1879-----	2.02	-	3.39	3.81	-	8.67	3.30	-	6.82
1880-----	1.43	-	2.95	2.75	-	7.05	2.21	-	5.16
Average-----	1.66	-	3.42	3.12	-	8.31	2.72	-	6.68
1881-----	1.67	-	2.75	3.59	4.87	8.55	2.93	-	6.04
1882-----	1.95	-	3.63	3.54	4.87	8.29	2.75	-	5.72
1883-----	3.09	-	4.99	3.53	4.56	8.40	3.34	-	6.58
1884-----	2.26	-	4.11	3.28	5.12	8.94	2.80	-	6.17
1885-----	1.68	-	3.48	3.58	5.26	9.36	2.58	-	5.91
Average-----	2.12	-	3.88	3.50	4.94	8.72	2.85	-	6.09
1886-----	1.85	-	3.89	2.70	4.13	7.12	2.25	-	5.23
1887-----	1.55	-	3.08	2.95	4.25	7.46	2.20	-	4.86
1888-----	2.23	-	4.38	2.98	4.10	7.81	2.55	-	5.61
1889-----	1.77	-	3.44	3.11	4.81	8.45	2.36	-	5.22
1890-----	2.15	2.85	3.56	3.00	4.50	8.13	2.52	3.50	5.01
Average-----	1.94	-	3.68	2.96	4.36	7.82	2.39	-	5.19
1891-----	2.86	3.85	4.94	3.39	5.01	8.45	3.08	4.30	6.06
1892-----	3.05	4.17	5.06	3.24	4.91	7.97	3.12	4.42	5.98
1893-----	2.26	3.32	4.07	3.42	5.21	8.43	2.70	4.03	5.39
1894-----	2.26	3.96	4.65	3.38	5.34	8.57	3.04	4.50	5.91
1895-----	3.09	4.78	5.46	2.95	4.51	7.26	3.67	4.68	6.00
Average-----	2.69	4.02	4.84	3.27	4.99	8.12	2.91	4.38	5.87
1896-----	2.51	3.92	4.45	3.36	5.79	9.22	2.85	4.62	5.85
1897-----	2.38	3.64	3.99	2.82	5.64	8.04	2.55	4.27	5.08
1898-----	2.64	3.75	4.06	2.82	5.57	7.70	2.71	4.28	4.97
1899-----	3.05	3.91	4.25	3.30	5.72	7.63	3.14	4.40	5.08
1900-----	3.74	4.79	5.32	2.85	5.15	7.16	3.44	4.87	5.72
Average-----	2.90	4.06	4.46	3.03	5.58	7.94	2.95	4.50	5.34
1901-----	3.16	4.21	4.74	3.53	5.40	7.60	3.27	4.54	5.40
1902-----	3.93	5.13	5.58	2.03	5.25	7.25	3.38	5.15	5.81
1903-----	3.47	4.63	5.07	3.44	5.01	6.94	3.46	4.72	5.47
1904-----	3.35	4.98	5.26	3.82	5.73	8.13	3.48	5.17	5.88
1905-----	3.53	5.02	5.14	3.89	5.43	8.29	3.63	5.14	5.78
Average-----	3.49	4.81	5.17	3.36	5.38	7.69	3.45	4.95	5.67
1906-----	3.38	4.76	4.72	3.43	5.28	7.81	3.39	4.87	5.27
1907-----	4.99	6.40	6.46	4.23	5.77	8.27	4.81	6.25	6.78
1908-----	3.50	5.44	5.42	3.89	5.84	8.14	3.60	5.54	5.97
1909-----	4.15	5.58	5.46	3.40	4.79	6.99	3.96	5.35	5.73
1910-----	4.00	5.53	5.32	3.55	4.65	7.11	3.89	5.30	5.62
Average-----	4.01	5.57	5.50	3.70	5.25	7.67	3.94	5.48	5.89
1911-----	3.53	5.02	4.82	4.02	4.90	7.73	3.65	4.97	5.35
1912-----	3.31	4.46	4.04	3.45	4.48	7.12	3.35	4.46	4.53
1913-----	3.79	4.90	4.53	3.52	4.10	6.75	3.73	4.70	4.89
1914-----	3.19	4.90	4.40	3.31	4.05	6.55	3.22	4.66	4.78
1915-----	3.02	4.47	3.80	3.32	4.33	6.58	3.09	4.44	4.27
Average-----	3.27	4.75	4.31	3.52	4.37	6.95	3.40	4.65	4.76
1916-----	2.98	3.88	3.33	3.47	4.11	6.34	3.09	3.93	3.77
1917-----	3.50	4.33	3.83	3.77	3.98	5.84	3.56	4.25	4.14
1918-----	3.30	3.97	3.50	3.75	3.83	5.58	3.38	3.94	3.80
1919-----	2.71	4.16	3.62	4.11	4.64	7.21	2.99	4.28	4.19
1920-----	2.78	3.79	3.13	3.38	3.74	5.48	2.90	3.78	3.45
Average-----	3.05	4.03	3.48	3.70	4.06	6.07	3.18	4.03	3.86
1921-----	2.18	4.38	3.48	3.43	3.80	6.05	2.42	4.20	3.94
1922-----	2.45	5.16	3.99	1.91	3.81	5.49	2.35	4.90	4.16
1923-----	2.77	4.65	3.46	3.23	3.62	5.45	2.85	4.39	3.74
1924-----	3.08	5.39	3.94	3.10	3.39	5.64	3.08	4.80	4.20
1925-----	3.12	4.79	3.53	2.50	4.12	6.47	2.98	4.65	3.84
Average-----	2.70	4.87	3.67	2.83	3.71	5.80	2.73	4.58	3.96

See footnote at end of table.

TABLE 52. - Coal mine fatality rates for the United States, 1870-1972 ^{1/} - Continued
(Includes underground and surface injuries)

Year	Bituminous coal mines			Anthracite mines			Total		
	Per thousand employed	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Per million tons mined
1926-----	3.48	4.86	3.60	2.74	3.37	5.36	3.32	4.50	3.83
1927-----	2.93	4.60	3.36	2.96	3.94	6.11	2.94	4.43	3.73
1928-----	3.31	4.90	3.45	2.78	3.85	5.93	3.19	4.64	3.78
1929-----	3.39	4.63	3.19	3.18	4.24	6.53	3.34	4.54	3.59
1930-----	3.28	5.26	3.46	2.94	4.22	6.40	3.20	5.00	3.84
Average-----	3.27	4.84	3.42	2.92	3.90	6.04	3.19	4.61	3.75
1931-----	2.40	4.42	2.83	2.75	4.43	6.42	2.48	4.42	3.31
1932-----	2.36	4.85	3.09	2.05	3.83	4.99	2.29	4.60	3.36
1933-----	1.99	3.58	2.50	2.21	3.58	4.66	2.03	3.58	2.78
1934-----	2.09	3.52	2.67	2.47	3.61	4.69	2.16	3.54	2.94
1935-----	2.09	3.53	2.60	2.66	4.26	5.24	2.20	3.67	2.92
Average-----	2.18	3.93	2.73	2.44	3.96	5.23	2.24	3.93	3.06
1936-----	2.28	3.46	2.52	2.39	3.73	4.46	2.30	3.50	2.73
1937-----	2.44	3.74	2.68	2.17	3.44	4.15	2.40	3.69	2.83
1938-----	1.98	3.68	2.52	2.34	4.08	4.88	2.04	3.76	2.79
1939-----	1.95	3.29	2.19	2.24	3.61	4.11	2.00	3.35	2.41
1940-----	2.73	4.07	2.61	1.99	3.16	3.57	2.60	3.92	2.71
Average-----	2.28	3.65	2.51	2.23	3.60	4.23	2.27	3.64	2.70
1941-----	2.34	3.28	2.08	2.18	3.16	3.58	2.32	3.26	2.22
1942-----	2.77	3.41	2.14	2.75	3.45	3.88	2.77	3.42	2.30
1943-----	3.01	3.44	2.06	2.85	3.17	3.80	2.98	3.39	2.22
1944-----	2.99	3.22	1.81	2.24	2.29	2.74	2.86	3.05	1.90
1945-----	2.53	2.96	1.60	1.96	2.19	2.60	2.44	2.82	1.69
Average-----	2.72	3.27	1.94	2.41	2.84	3.32	2.67	3.20	2.06
1946-----	2.06	2.88	1.49	2.22	2.47	2.86	2.09	2.80	1.63
1947-----	2.39	3.02	1.57	2.20	2.57	3.02	2.36	2.96	1.69
1948-----	2.01	2.73	1.45	1.76	2.00	2.40	1.97	2.60	1.54
1949-----	1.21	2.19	1.13	1.20	1.83	2.11	1.21	1.13	1.22
1950-----	1.35	2.19	1.06	1.25	1.77	2.09	1.33	2.11	1.14
Average-----	1.80	2.65	1.36	1.73	2.16	2.54	1.79	2.56	1.47
1951-----	1.84	2.74	1.28	1.45	2.09	2.41	1.78	2.64	1.37
1952-----	1.33	2.14	.96	1.58	2.29	2.44	1.37	2.16	1.07
1953-----	1.34	2.12	.87	1.15	2.04	2.10	1.31	2.11	.95
1954-----	1.38	2.34	.85	1.48	2.72	2.14	1.40	2.40	.94
1955-----	1.60	2.28	.78	1.74	2.86	2.07	1.61	2.35	.85
Average-----	1.51	2.35	.96	1.46	2.32	2.26	1.50	2.34	1.05
1956-----	1.72	2.43	.79	1.72	2.44	1.74	1.72	2.43	.85
1957-----	1.91	2.78	.87	1.65	2.53	2.00	1.88	2.75	.93
1958-----	1.64	2.70	.79	1.21	1.97	1.51	1.59	2.61	.83
1959-----	1.36	2.19	.60	2.02	3.49	2.29	1.44	2.33	.68
1960-----	1.70	2.68	.70	1.84	3.12	1.85	1.71	2.73	.75
Average-----	1.68	2.56	.76	1.67	2.63	1.87	1.68	2.57	.81
1961-----	1.81	2.80	.68	1.20	1.84	1.09	1.75	2.71	.70
1962-----	1.79	2.73	.62	1.86	2.73	1.52	1.79	2.73	.66
1963-----	1.75	2.58	.55	2.37	3.30	1.74	1.81	2.65	.59
1964-----	1.58	2.24	.45	1.83	2.56	1.37	1.61	2.27	.48
1965-----	1.82	2.58	.49	.72	1.06	.54	1.74	2.47	.49
Average-----	1.75	2.59	.55	1.61	2.34	1.28	1.74	2.57	.58
1966-----	1.67	2.35	.43	.65	.96	.46	1.60	2.27	.43
1967-----	1.62	2.21	.39	1.16	1.59	.73	1.59	2.18	.40
1968-----	2.41	3.27	.57	.58	.80	.35	2.31	3.15	.56
1969-----	1.49	1.99	.34	2.19	2.83	1.27	1.52	2.03	.36
1970-----	1.84	2.43	.43	.84	1.08	.51	1.80	2.38	.43
Average-----	1.80	2.45	.43	1.03	1.41	.65	1.76	2.40	.43
1971-----	1.28	1.71	.32	.99	1.19	.57	1.27	1.69	.32
1972-----	.97	NA	.29	.61	NA	.46	.96	NA	.29

NA Not available.

^{1/} Before 1910 certain States did not maintain records of injuries. The above rates are based exclusively on tonnage and men employed in States for which injury records are available.

TABLE 53. - Bituminous coal mines: Fatalities, by principal cause of injury, 1906-72 ^{1/}

Year	Underground workings									Surface ^{2/}	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	All other underground	Total underground	Shaft and slope	Total		
1906-----	826	192	219	115	52	27	1,431	73	1,504	77	1,581
1907-----	911	260	911	134	49	99	2,364	59	2,423	111	2,534
1908-----	829	229	320	109	53	97	1,637	53	1,690	77	1,767
1909-----	975	240	264	122	52	312	1,965	37	2,002	73	2,075
1910-----	1,061	295	477	113	76	46	2,068	60	2,128	92	2,220
Average-----	921	243	438	119	56	116	1,893	56	1,949	86	2,035
1911-----	1,007	294	331	72	92	44	1,840	31	1,871	86	1,957
1912-----	943	296	255	70	75	44	1,683	39	1,722	96	1,818
1913-----	1,007	344	464	63	79	82	2,039	32	2,071	96	2,167
1914-----	903	309	305	56	86	55	1,714	41	1,755	104	1,859
1915-----	818	269	270	76	85	35	1,553	30	1,583	100	1,683
Average-----	936	303	325	67	83	52	1,766	35	1,801	96	1,897
1916-----	850	330	183	60	81	49	1,553	34	1,587	84	1,671
1917-----	965	433	319	55	76	60	1,908	44	1,952	162	2,114
1918-----	1,052	446	103	85	77	76	1,839	41	1,880	149	2,029
1919-----	878	310	149	57	64	79	1,537	39	1,576	112	1,688
1920-----	937	342	124	82	70	72	1,627	34	1,661	120	1,781
Average-----	936	372	176	68	74	67	1,693	38	1,731	126	1,857
1921-----	782	275	62	74	76	71	1,340	25	1,365	83	1,448
1922-----	780	286	298	55	71	56	1,546	36	1,582	102	1,684
1923-----	948	347	330	66	70	64	1,825	31	1,856	97	1,953
1924-----	846	299	486	46	72	56	1,805	17	1,822	84	1,906
1925-----	910	310	302	49	80	76	1,727	30	1,757	77	1,834
Average-----	853	303	296	58	74	65	1,649	27	1,676	89	1,765
1926-----	994	384	373	46	94	62	1,953	27	1,980	85	2,065
1927-----	924	309	187	48	94	70	1,632	22	1,654	88	1,742
1928-----	825	313	347	41	82	54	1,662	13	1,675	54	1,729
1929-----	922	349	168	45	75	56	1,615	17	1,632	73	1,705
1930-----	856	285	234	31	63	68	1,537	9	1,546	73	1,619
Average-----	904	328	262	42	82	62	1,680	17	1,697	75	1,772
1931-----	624	194	68	15	62	44	1,007	19	1,026	54	1,080
1932-----	466	146	162	21	42	45	882	13	895	63	958
1933-----	458	162	27	24	46	45	762	10	772	61	833
1934-----	539	168	40	21	53	64	885	9	894	64	958
1935-----	524	198	26	31	43	70	892	13	905	63	968
Average-----	522	174	65	22	49	54	886	12	898	61	959
1936-----	624	202	41	31	44	81	1,023	11	1,034	64	1,098
1937-----	606	244	116	31	52	64	1,113	15	1,128	70	1,198
1938-----	474	142	84	23	38	53	814	9	823	57	880
1939-----	500	155	43	15	49	56	818	5	823	44	867
1940-----	520	192	292	28	30	62	1,124	12	1,136	68	1,204
Average-----	545	187	115	26	42	63	978	11	989	60	1,049

NOTE: Beginning with 1941, the cause classification in this historical series is changed as follows: (1) Fatalities in shafts and slopes have been included in "Underground workings" and are distributed according to the specified causes; prior to 1941 these deaths were grouped and shown as "Shaft and slope." (2) Fatalities from underground machinery accidents are grouped and shown separately; prior to 1941 such deaths were included in "All other underground." (3) Fatalities from roof or face falls caused by haulage equipment or machinery knocking out roof-support have been included in the respective haulage or machinery classifications; prior to 1941 such deaths were included in "Falls of roof and face." (4) Fatalities from pressure bumps and bursts and from inrush of water or material are included in "All other underground;" prior to 1941 such deaths were included in "Falls of roof and face."

Year	Underground workings								Surface ^{2/}	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	Machinery	All other underground	Total		
1941-----	552	206	89	24	42	39	42	994	78	1,072
1942-----	579	253	148	16	51	49	47	1,143	102	1,245
1943-----	561	253	166	27	33	31	59	1,130	95	1,225
1944-----	551	239	32	21	27	49	96	1,015	109	1,124
1945-----	429	216	72	23	20	40	31	831	94	925
Average-----	534	233	102	22	35	42	55	1,023	95	1,118

See footnotes at end of table.

TABLE 53. - Bituminous coal mines: Fatalities, by principal cause of injury, 1906-72 ^{1/} - Continued

Year	Underground workings								Surface ^{2/}	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	Machinery	All other underground	Total		
1946-----	420	172	27	12	17	34	29	711	84	795
1947-----	434	213	154	23	20	23	27	894	91	985
1948-----	430	182	44	22	19	22	42	761	101	862
1949-----	239	108	3	14	10	21	10	425	69	494
1950-----	296	121	3	10	11	19	9	469	81	550
Average-----	368	159	46	16	15	24	24	652	85	737
1951-----	284	112	153	7	18	27	17	618	66	684
1952-----	228	109	11	5	10	15	11	389	60	449
1953-----	221	81	9	4	12	14	8	349	48	397
1954-----	168	69	17	5	11	16	5	291	43	334
1955-----	186	69	2	10	15	16	5	303	57	360
Average-----	217	88	39	6	13	18	9	390	55	445
1956-----	208	73	5	8	14	18	16	342	50	392
1957-----	198	56	63	7	11	18	22	375	52	427
1958-----	157	46	41	7	14	12	12	289	3/ 37	326
1959-----	135	37	10	4	7	13	4	210	36	246
1960-----	145	38	3	3	18	14	25	246	44	290
Average-----	169	50	24	6	13	15	16	293	43	336
1961-----	135	41	26	4	12	12	12	242	33	275
1962-----	105	43	52	4	6	16	-	226	37	263
1963-----	123	37	31	2	5	14	6	218	34	252
1964-----	114	42	3	1	5	17	6	188	30	218
1965-----	126	34	19	1	4	14	17	215	36	251
Average-----	121	40	26	2	6	15	8	218	34	252
1966-----	110	40	10	3	2	12	12	189	38	227
1967-----	94	29	12	2	10	14	5	166	47	213
1968-----	98	31	88	2	17	15	16	267	40	307
1969-----	77	32	-	1	7	18	7	142	48	190
1970-----	84	37	41	2	11	26	4	205	50	255
Average-----	93	34	30	2	9	17	9	194	45	239
1971-----	60	35	2	2	13	21	7	140	36	176
1972-----	49	37	5	2	2	14	12	121	32	153

^{1/} Figures for 1906-09 cover only those States that maintained complete records of fatal injuries. These represented 98 to 99 percent of the total production of coal in the United States. Figures for 1910 to date represent the entire bituminous coal industry.

^{2/} Includes fatalities that occurred at all other work locations, including the associated surface works of underground mines, strip mines, and mechanical-cleaning plants; beginning with 1955, includes fatalities in auger mines.

^{3/} Includes one surface fatality resulting from a fall of roof underground in Kentucky, 1958.

TABLE 54. - Pennsylvania anthracite mines: Fatalities, by principal cause of injury, 1906-72

Year	Underground workings									Surface 1/	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	All other under- ground	Total under- ground	Shaft and slope	Total		
1906-----	214	67	46	82	1	27	437	19	456	101	557
1907-----	294	88	45	87	3	57	574	27	601	107	708
1908-----	299	90	55	94	1	33	572	24	596	82	678
1909-----	254	71	31	69	6	49	480	10	490	77	567
1910-----	253	93	20	82	3	38	489	20	509	92	601
Average-----	262	82	39	83	3	41	510	20	530	92	622
1911-----	252	92	34	88	2	126	594	21	615	84	699
1912-----	243	79	35	77	5	37	476	22	498	103	601
1913-----	257	85	50	75	1	55	523	30	553	65	618
1914-----	228	76	44	90	3	45	486	47	533	62	595
1915-----	261	80	34	79	4	58	516	10	526	60	586
Average-----	248	83	39	82	3	64	519	26	545	75	620
1916-----	215	64	43	86	9	57	474	15	489	66	555
1917-----	265	64	41	55	3	39	467	16	483	99	582
1918-----	242	66	26	50	11	47	442	11	453	98	551
1919-----	229	73	42	149	4	49	546	13	559	76	635
1920-----	197	66	36	49	6	40	394	22	416	75	491
Average-----	229	67	38	78	7	46	465	15	480	83	563
1921-----	243	70	64	68	4	50	499	11	510	37	547
1922-----	128	58	13	38	3	19	259	5	264	36	300
1923-----	219	73	42	49	5	45	433	15	448	61	509
1924-----	216	58	50	53	8	45	430	12	442	54	496
1925-----	170	56	43	53	4	20	346	4	350	50	400
Average-----	195	63	42	52	5	36	393	10	403	47	450
1926-----	220	52	49	50	2	39	412	8	420	33	453
1927-----	225	52	60	62	6	43	448	7	455	34	489
1928-----	243	52	29	33	6	42	405	12	417	30	447
1929-----	260	65	27	43	6	31	432	12	444	38	482
1930-----	243	40	30	47	8	34	402	2	404	40	444
Average-----	238	52	39	47	6	38	420	8	428	35	463
1931-----	234	43	20	25	3	23	348	4	352	31	383
1932-----	161	33	7	15	5	12	233	2	235	14	249
1933-----	119	32	13	10	7	17	198	6	204	27	231
1934-----	150	29	12	15	3	25	234	4	238	30	268
1935-----	140	30	23	19	2	15	229	10	239	35	274
Average-----	161	33	15	17	4	18	248	5	253	28	281
1936-----	120	26	16	20	8	26	216	6	222	22	244
1937-----	120	31	-	14	4	16	185	5	190	25	215
1938-----	128	23	20	11	2	17	201	3	204	21	225
1939-----	121	27	3	17	2	15	185	6	191	20	211
1940-----	105	36	5	8	7	8	169	3	172	12	184
Average-----	118	29	9	14	5	16	191	5	196	20	216

NOTE: Beginning with 1941, the cause classification in this historical series is changed as follows: (1) Fatalities in shafts and slopes have been included in "Underground workings" and are distributed according to the specified causes; prior to 1941 these deaths were grouped and shown as "Shaft and slope." (2) Fatalities from underground machinery accidents are grouped and shown separately; prior to 1941 such deaths were included in "All other underground." (3) Fatalities from roof or face falls caused by haulage equipment or machinery knocking out roof-support have been included in the respective haulage or machinery classifications; prior to 1941 such deaths were included in "Falls of roof and face." (4) Fatalities from pressure bumps and bursts and from inrush of water or material are included in "All other underground;" prior to 1941 such deaths were included in "Falls of roof and face."

Year	Underground workings								Surface 1/	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	Machinery	All other under- ground	Total		
1941-----	91	27	8	12	5	-	29	172	22	194
1942-----	123	38	9	13	6	1	20	210	16	226
1943-----	104	36	15	9	2	3	28	197	29	226
1944-----	68	24	4	16	3	-	36	151	23	174
1945-----	62	25	4	11	1	1	25	129	14	143
Average-----	90	30	8	12	3	1	28	172	21	193

See footnote at end of table.

TABLE 54. - Pennsylvania anthracite mines: Fatalities, by principal cause of injury, 1906-72 - Continued

Year	Underground workings								Surface 1/	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	Machinery	All other under- ground	Total		
1946-----	93	23	2	8	3	1	22	152	21	173
1947-----	76	17	35	7	4	-	14	153	20	173
1948-----	78	14	2	7	1	1	16	119	18	137
1949-----	52	14	5	3	-	-	9	83	8	91
1950-----	52	7	5	5	1	-	8	78	15	93
Average-----	70	15	10	6	2	(2/)	14	117	16	133
1951-----	43	17	9	5	1	1	13	89	12	101
1952-----	36	19	4	4	-	2	20	85	14	99
1953-----	42	2	5	1	2	-	8	60	4	64
1954-----	36	8	1	-	1	-	5	51	11	62
1955-----	31	8	2	2	-	-	6	49	11	60
Average-----	38	11	4	2	1	1	10	67	10	77
1956-----	31	6	4	1	2	-	4	48	8	56
1957-----	30	5	3	4	1	-	6	49	2	51
1958-----	19	-	1	1	-	1	4	26	6	32
1959-----	18	8	-	2	-	-	13	41	6	47
1960-----	18	4	-	1	-	-	5	28	7	35
Average-----	23	5	1	2	1	(2/)	6	38	6	44
1961-----	9	3	-	1	-	1	-	14	5	19
1962-----	8	2	-	-	-	-	8	18	8	26
1963-----	13	2	5	3	-	-	4	27	5	32
1964-----	9	5	3	3	-	-	2	22	2	24
1965-----	5	1	-	-	-	-	2	8	-	8
Average-----	9	3	2	1	-	(2/)	3	18	4	22
1966-----	5	-	-	-	-	-	-	5	1	6
1967-----	7	-	-	-	-	1	-	8	1	9
1968-----	1	-	-	-	-	-	-	1	3	4
1969-----	1	1	1	-	-	-	4	7	6	13
1970-----	-	-	-	1	-	-	-	1	4	5
Average-----	3	(2/)	(2/)	(2/)	-	(2/)	1	4	3	7
1971-----	1	-	-	-	-	-	-	1	4	5
1972-----	1	-	-	-	-	-	-	1	2	3

1/ Includes strip mines, culm banks, dredges, and mechanical-cleaning plants.

2/ Less than 0.5.

TABLE 55. - All coal mines: Fatalities, by principal cause of injury, 1906-72 ^{1/}

Year	Underground workings									Surface ^{2/}	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	All other underground	Total underground	Shaft and slope	Total		
1906-----	1,040	259	265	197	53	54	1,868	92	1,960	178	2,138
1907-----	1,205	348	956	221	52	156	2,938	86	3,024	218	3,242
1908-----	1,128	319	375	203	54	130	2,209	77	2,286	159	2,445
1909-----	1,229	311	295	191	58	361	2,445	47	2,492	150	2,642
1910-----	1,314	388	497	195	79	84	2,557	80	2,637	184	2,821
Average-----	1,183	325	477	202	59	157	2,403	76	2,479	178	2,657
1911-----	1,259	386	365	160	94	170	2,434	52	2,486	170	2,656
1912-----	1,186	375	290	147	80	81	2,159	61	2,220	199	2,419
1913-----	1,264	429	514	138	80	137	2,562	62	2,624	161	2,785
1914-----	1,131	385	349	146	89	100	2,200	88	2,288	166	2,454
1915-----	1,079	349	304	155	89	93	2,069	40	2,109	160	2,269
Average-----	1,184	386	364	149	86	116	2,285	61	2,346	171	2,517
1916-----	1,065	394	226	146	90	106	2,027	49	2,076	150	2,226
1917-----	1,230	497	360	110	79	99	2,375	60	2,435	261	2,696
1918-----	1,294	512	129	135	88	123	2,281	52	2,333	247	2,580
1919-----	1,107	383	191	206	68	128	2,083	52	2,135	188	2,323
1920-----	1,134	408	160	131	76	112	2,021	56	2,077	195	2,272
Average-----	1,165	439	214	146	81	113	2,158	53	2,211	209	2,420
1921-----	1,025	345	126	142	80	121	1,839	36	1,875	120	1,995
1922-----	908	344	311	93	74	75	1,805	41	1,846	138	1,984
1923-----	1,167	420	372	115	75	109	2,258	46	2,304	158	2,462
1924-----	1,062	357	536	99	80	101	2,235	29	2,264	138	2,402
1925-----	1,080	366	345	102	84	96	2,073	34	2,107	127	2,234
Average-----	1,048	366	338	110	79	101	2,042	37	2,079	136	2,215
1926-----	1,214	436	422	96	96	101	2,365	35	2,400	118	2,518
1927-----	1,149	361	247	110	100	113	2,080	29	2,109	122	2,231
1928-----	1,068	365	376	74	88	96	2,067	25	2,092	84	2,176
1929-----	1,182	414	195	88	81	87	2,047	29	2,076	111	2,187
1930-----	1,099	325	264	78	71	102	1,939	11	1,950	113	2,063
Average-----	1,142	380	301	89	88	100	2,100	25	2,125	110	2,235
1931-----	858	237	88	40	65	67	1,355	23	1,378	85	1,463
1932-----	627	179	169	36	47	57	1,115	15	1,130	77	1,207
1933-----	577	194	40	34	53	62	960	16	976	88	1,064
1934-----	689	197	52	36	56	89	1,119	13	1,132	94	1,226
1935-----	664	228	49	50	45	85	1,121	23	1,144	98	1,242
Average-----	683	207	80	39	53	72	1,134	17	1,151	89	1,240
1936-----	744	228	57	51	52	107	1,239	17	1,256	86	1,342
1937-----	726	275	116	45	56	80	1,298	20	1,318	95	1,413
1938-----	602	165	104	34	40	70	1,015	12	1,027	78	1,105
1939-----	621	182	46	32	51	71	1,003	11	1,014	64	1,078
1940-----	625	228	297	36	37	70	1,293	15	1,308	80	1,388
Average-----	663	216	124	40	47	79	1,169	16	1,185	80	1,265

NOTE: Beginning with 1941, the cause classification in this historical series is changed as follows: (1) Fatalities in shafts and slopes have been included in "Underground workings" and are distributed according to the specified causes; prior to 1941 these deaths were grouped and shown as "Shaft and slope." (2) Fatalities from underground machinery accidents are grouped and shown separately; prior to 1941 such deaths were included in "All other underground." (3) Fatalities from roof or face falls caused by haulage equipment or machinery knocking out roof-support have been included in the respective haulage or machinery classifications; prior to 1941 such deaths were included in "Falls of roof and face." (4) Fatalities from pressure bumps and bursts and from inrush of water or material are included in "All other underground;" prior to 1941 such deaths were included in "Falls of roof and face."

Year	Underground workings								Surface ^{2/}	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	Machinery	All other underground	Total		
1941-----	643	233	97	36	47	39	71	1,166	100	1,266
1942-----	702	291	157	29	57	50	67	1,353	118	1,471
1943-----	665	289	181	36	35	34	87	1,327	124	1,451
1944-----	619	263	36	37	30	49	132	1,166	132	1,298
1945-----	491	241	76	34	21	41	56	960	108	1,068
Average-----	624	263	110	34	38	43	83	1,195	116	1,311

See footnotes at end of table.

TABLE 55. - All coal mines: Fatalities, by principal cause of injury, 1906-72 ^{1/} - Continued

Year	Underground workings								Surface 2/	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	Machinery	All other under- ground	Total		
1946-----	513	195	29	20	20	35	51	863	105	968
1947-----	510	230	189	30	24	23	41	1,047	111	1,158
1948-----	508	196	46	29	20	23	58	880	119	999
1949-----	311	122	8	17	10	21	19	508	77	585
1950-----	348	128	8	15	12	19	17	547	96	643
Average-----	438	174	56	22	17	24	38	769	101	870
1951-----	327	129	162	12	19	28	30	707	78	785
1952-----	264	128	15	9	10	17	31	474	74	548
1953-----	263	83	14	5	14	14	16	409	52	461
1954-----	204	77	18	5	12	16	10	342	54	396
1955-----	217	77	4	12	15	16	11	352	68	420
Average-----	255	99	43	8	14	19	19	457	65	522
1956-----	239	79	9	9	16	18	20	390	58	448
1957-----	228	61	66	11	12	18	28	424	54	478
1958-----	176	46	42	8	14	13	16	315	43	358
1959-----	153	45	10	6	7	13	17	251	42	293
1960-----	163	42	3	4	18	14	30	274	51	325
Average-----	192	55	25	8	14	15	22	331	49	380
1961-----	144	44	26	5	12	13	12	256	38	294
1962-----	113	45	52	4	6	16	8	244	45	289
1963-----	136	39	36	5	5	14	10	245	39	284
1964-----	123	47	6	4	5	17	8	210	32	242
1965-----	131	35	19	1	4	14	19	223	36	259
Average-----	130	43	28	3	6	15	11	236	38	274
1966-----	115	40	10	3	2	12	12	194	39	233
1967-----	101	29	12	2	10	15	5	174	48	222
1968-----	99	31	88	2	17	15	16	268	43	311
1969-----	78	33	1	1	7	18	11	149	54	203
1970-----	84	37	41	3	11	26	4	206	54	260
Average-----	96	34	30	2	9	17	10	198	48	246
1971-----	61	35	2	2	13	21	7	141	40	181
1972-----	50	37	5	2	2	14	12	122	34	156

^{1/} Figures for 1906-09 cover only those States that maintained complete records of fatal injuries. These represented 98 to 99 percent of the total production of coal in the United States. Figures for 1910 to date represent the entire coal industry.

^{2/} Includes fatalities that occurred at all other work locations, including the associated surface works of underground mines, strip mines, culm banks, dredges, and mechanical-cleaning plants; beginning with 1955, includes fatalities in auger mines.

^{3/} Includes one surface fatality resulting from a fall of roof underground in a bituminous coal mine in Kentucky, 1958.

TABLE 56. - Bituminous coal mines: Percentage distribution of fatalities,
by principal cause of injury, 1906-72 ^{1/}

Year	Underground workings									Surface 2/	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	All other under- ground	Total under- ground	Shaft and slope	Total		
1906-----	52.2	12.1	13.9	7.3	3.3	1.7	90.5	4.6	95.1	4.9	100.0
1907-----	36.0	10.3	36.0	5.2	1.9	3.9	93.3	2.3	95.6	4.4	100.0
1908-----	46.9	13.0	18.1	6.1	3.0	5.5	92.6	3.0	95.6	4.4	100.0
1909-----	47.0	11.6	12.7	5.9	2.5	15.0	94.7	1.8	96.5	3.5	100.0
1910-----	47.8	13.3	21.5	5.1	3.4	2.1	93.2	2.7	95.9	4.1	100.0
Average-----	45.3	11.9	21.5	5.8	2.8	5.7	93.0	2.8	95.8	4.2	100.0
1911-----	51.5	15.0	16.9	3.7	4.7	2.2	94.0	1.6	95.6	4.4	100.0
1912-----	51.9	16.3	14.0	3.9	4.1	2.4	92.6	2.1	94.7	5.3	100.0
1913-----	46.5	15.9	21.4	2.9	3.6	3.8	94.1	1.5	95.6	4.4	100.0
1914-----	48.6	16.6	16.4	3.0	4.6	3.0	92.2	2.2	94.4	5.6	100.0
1915-----	48.6	16.0	16.0	4.5	5.1	2.1	92.3	1.8	94.1	5.9	100.0
Average-----	49.3	16.0	17.1	3.5	4.4	2.8	93.1	1.8	94.9	5.1	100.0
1916-----	50.9	19.7	11.0	3.6	4.8	2.9	92.9	2.1	95.0	5.0	100.0
1917-----	45.7	20.5	15.1	2.6	3.6	2.8	90.3	2.0	92.3	7.7	100.0
1918-----	51.8	22.0	5.1	4.2	3.8	3.7	90.6	2.1	92.7	7.3	100.0
1919-----	52.0	18.4	8.8	3.4	3.8	4.7	91.1	2.3	93.4	6.6	100.0
1920-----	52.6	19.2	7.0	4.6	3.9	4.1	91.4	1.9	93.3	6.7	100.0
Average-----	50.4	20.0	9.5	3.7	4.0	3.6	91.2	2.0	93.2	6.8	100.0
1921-----	54.0	19.0	4.3	5.1	5.2	4.9	92.5	1.8	94.3	5.7	100.0
1922-----	46.3	17.0	17.7	3.3	4.2	3.3	91.8	2.1	93.9	6.1	100.0
1923-----	48.5	17.8	16.9	3.3	3.6	3.3	93.4	1.6	95.0	5.0	100.0
1924-----	44.4	15.7	25.5	2.4	3.8	2.9	94.7	.9	95.6	4.4	100.0
1925-----	49.6	16.9	16.5	2.7	4.4	4.1	94.2	1.6	95.8	4.2	100.0
Average-----	48.3	17.1	16.8	3.3	4.2	3.7	93.4	1.6	95.0	5.0	100.0
1926-----	48.1	18.6	18.1	2.2	4.6	3.0	94.6	1.3	95.9	4.1	100.0
1927-----	53.1	17.7	10.7	2.8	5.4	4.0	93.7	1.2	94.9	5.1	100.0
1928-----	47.7	18.1	20.1	2.4	4.7	3.1	96.1	.8	96.9	3.1	100.0
1929-----	54.1	20.5	9.9	2.6	4.4	3.2	94.7	1.0	95.7	4.3	100.0
1930-----	52.9	17.6	14.4	1.9	3.9	4.2	94.9	.6	95.5	4.5	100.0
Average-----	51.0	18.5	14.8	2.4	4.6	3.5	94.8	1.0	95.8	4.2	100.0
1931-----	57.8	18.0	6.3	1.4	5.7	4.0	93.2	1.8	95.0	5.0	100.0
1932-----	48.7	15.2	16.9	2.2	4.4	4.7	92.1	1.3	93.4	6.6	100.0
1933-----	55.0	19.4	3.3	2.9	5.5	5.4	91.5	1.2	92.7	7.3	100.0
1934-----	56.3	17.5	4.2	2.2	5.5	6.7	92.4	.9	93.3	6.7	100.0
1935-----	54.1	20.5	2.7	3.2	4.4	7.2	92.1	1.4	93.5	6.5	100.0
Average-----	54.4	18.2	6.8	2.3	5.1	5.6	92.4	1.2	93.6	6.4	100.0
1936-----	56.8	18.4	3.8	2.8	4.0	7.4	93.2	1.0	94.2	5.8	100.0
1937-----	50.6	20.4	9.7	2.6	4.3	5.3	92.9	1.3	94.2	5.8	100.0
1938-----	53.9	16.1	9.6	2.6	4.3	6.0	92.5	1.0	93.5	6.5	100.0
1939-----	57.7	17.9	4.9	1.7	5.7	6.4	94.3	.6	94.9	5.1	100.0
1940-----	43.2	15.9	24.3	2.3	2.5	5.2	93.4	1.0	94.4	5.6	100.0
Average-----	51.9	17.8	11.0	2.5	4.0	6.0	93.2	1.1	94.3	5.7	100.0

NOTE: Beginning with 1941, the cause classification in this historical series is changed as follows: (1) Fatalities in shafts and slopes have been included in "Underground workings" and are distributed according to the specified causes; prior to 1941 these deaths were grouped and shown as "Shaft and slope." (2) Fatalities from underground machinery accidents are grouped and shown separately; prior to 1941 such deaths were included in "All other underground." (3) Fatalities from roof or face falls caused by haulage equipment or machinery knocking out roof-support have been included in the respective haulage or machinery classifications; prior to 1941 such deaths were included in "Falls of roof and face." (4) Fatalities from pressure bumps and bursts and from inrush of water or material are included in "All other underground;" prior to 1941 such deaths were included in "Falls of roof and face."

Year	Underground workings								Surface 2/	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	Machinery	All other under- ground	Total		
1941-----	51.5	19.2	8.3	2.2	3.9	3.7	3.9	92.7	7.3	100.0
1942-----	46.5	20.3	11.9	1.3	4.1	3.9	3.8	91.8	8.2	100.0
1943-----	45.8	20.6	13.6	2.2	2.7	2.5	4.8	92.2	7.8	100.0
1944-----	49.0	21.3	2.8	1.9	2.4	4.4	8.5	90.3	9.7	100.0
1945-----	46.4	23.3	7.8	2.5	2.2	4.3	3.3	89.8	10.2	100.0
Average-----	47.8	20.8	9.1	2.0	3.1	3.8	4.9	91.5	8.5	100.0

See footnotes at end of table.

TABLE 56. - Bituminous coal mines: Percentage distribution of fatalities,
by principal cause of injury, 1906-72 ^{1/} - Continued

Year	Underground workings								Surface ^{2/}	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	Machinery	All other under- ground	Total		
1946-----	52.8	21.6	3.4	1.5	2.1	4.3	3.7	89.4	10.6	100.0
1947-----	44.1	21.6	15.6	2.3	2.0	2.4	2.8	90.8	9.2	100.0
1948-----	49.9	21.1	5.1	2.6	2.2	2.5	4.9	88.3	11.7	100.0
1949-----	52.4	21.9	.6	2.8	2.0	4.3	2.0	86.0	14.0	100.0
1950-----	53.8	22.0	.6	1.8	2.0	3.5	1.6	85.3	14.7	100.0
Average-----	49.9	21.6	6.2	2.2	2.0	3.3	3.3	88.5	11.5	100.0
1951-----	41.5	16.4	22.4	1.0	2.6	4.0	2.5	90.4	9.6	100.0
1952-----	50.8	24.2	2.5	1.1	2.2	3.3	2.5	86.6	13.4	100.0
1953-----	55.7	20.4	2.3	1.0	3.0	3.5	2.0	87.9	12.1	100.0
1954-----	50.3	20.6	5.1	1.5	3.3	4.8	1.5	87.1	12.9	100.0
1955-----	51.6	19.2	.6	2.8	4.2	4.4	1.4	84.2	15.8	100.0
Average-----	48.8	19.8	8.8	1.4	2.9	4.0	2.0	87.7	12.3	100.0
1956-----	53.0	18.6	1.3	2.0	3.6	4.6	4.1	87.2	12.8	100.0
1957-----	46.4	13.1	14.8	1.6	2.6	4.2	5.1	87.8	12.2	100.0
1958-----	48.1	14.1	12.6	2.1	4.3	3.7	3.7	88.6	11.4	100.0
1959-----	54.9	15.0	4.1	1.6	2.9	5.3	1.6	85.4	14.6	100.0
1960-----	50.0	13.1	1.0	1.0	6.2	4.9	8.6	84.8	15.2	100.0
Average-----	50.3	14.9	7.1	1.8	3.9	4.5	4.7	87.2	12.8	100.0
1961-----	49.0	14.9	9.5	1.4	4.4	4.4	4.4	88.0	12.0	100.0
1962-----	39.9	16.3	19.8	1.5	2.3	6.1	-	85.9	14.1	100.0
1963-----	48.8	14.7	12.3	.8	2.0	5.5	2.4	86.5	13.5	100.0
1964-----	52.2	19.3	1.4	.5	2.3	7.8	2.7	86.2	13.8	100.0
1965-----	50.2	13.5	7.6	.4	1.6	5.6	6.8	85.7	14.3	100.0
Average-----	48.0	15.9	10.3	.8	2.4	5.9	3.2	86.5	13.5	100.0
1966-----	48.5	17.6	4.4	1.3	.9	5.3	5.3	83.3	16.7	100.0
1967-----	44.1	13.6	5.6	.9	4.7	6.6	2.4	77.9	22.1	100.0
1968-----	31.9	10.1	28.7	.7	5.5	4.9	5.2	87.0	13.0	100.0
1969-----	40.5	16.8	-	.5	3.7	9.5	3.7	74.7	25.3	100.0
1970-----	32.9	14.5	16.1	.8	4.3	10.2	1.6	80.4	19.6	100.0
Average-----	38.9	14.2	12.6	.8	3.8	7.1	3.8	81.2	18.8	100.0
1971-----	34.1	19.9	1.1	1.1	7.4	11.9	4.0	79.5	20.5	100.0
1972-----	32.0	24.2	3.3	1.3	1.3	9.2	7.8	79.1	20.9	100.0

^{1/} Figures for 1906-09 cover only those States that maintained complete records of fatal injuries. These represented 98 to 99 percent of the total production of coal in the United States. Figures for 1910 to date represent the entire bituminous coal industry.

^{2/} Includes fatalities that occurred at all other work locations, including the associated surface works of underground mines, strip mines, and mechanical-cleaning plants; beginning with 1955, includes fatalities in auger mines.

TABLE 57. - Pennsylvania anthracite mines: Percentage distribution of fatalities,
by principal cause of injury, 1906-72

Year	Underground workings									Surface 1/	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	All other under- ground	Total under- ground	Shaft and slope	Total		
1906-----	38.4	12.0	8.3	14.7	0.2	4.9	78.5	3.4	81.9	18.1	100.0
1907-----	41.5	12.4	6.4	12.3	.4	8.1	81.1	3.8	84.9	15.1	100.0
1908-----	44.1	13.3	8.1	13.9	.1	4.9	84.4	3.5	87.9	12.1	100.0
1909-----	44.8	12.5	5.5	12.2	1.1	8.6	84.7	1.7	86.4	13.6	100.0
1910-----	42.1	15.5	3.3	13.7	.5	6.3	81.4	3.3	84.7	15.3	100.0
Average-----	42.1	13.2	6.3	13.3	.5	6.6	82.0	3.2	85.2	14.8	100.0
1911-----	36.1	13.2	4.9	12.6	.2	18.0	85.0	3.0	88.0	12.0	100.0
1912-----	40.4	13.2	5.8	12.8	.8	6.2	79.2	3.7	82.9	17.1	100.0
1913-----	41.6	13.8	8.1	12.1	.1	8.9	84.6	4.9	89.5	10.5	100.0
1914-----	38.3	12.8	7.4	15.1	.5	7.6	81.7	7.9	89.6	10.4	100.0
1915-----	44.5	13.7	5.8	13.5	.7	9.9	88.1	1.7	89.8	10.2	100.0
Average-----	40.0	13.4	6.3	13.2	.5	10.3	83.7	4.2	87.9	12.1	100.0
1916-----	38.7	11.5	7.8	15.5	1.6	10.3	85.4	2.7	88.1	11.9	100.0
1917-----	45.5	11.0	7.0	9.5	.5	6.7	80.2	2.8	83.0	17.0	100.0
1918-----	43.9	12.0	4.7	9.1	2.0	8.5	80.2	2.0	82.2	17.8	100.0
1919-----	36.1	11.5	6.6	23.5	.6	7.7	86.0	2.0	88.0	12.0	100.0
1920-----	40.1	13.5	7.3	10.0	1.2	8.1	80.2	4.5	84.7	15.3	100.0
Average-----	40.7	11.9	6.7	14.0	1.1	8.2	82.6	2.7	85.3	14.7	100.0
1921-----	44.4	12.8	11.7	12.4	.7	9.2	91.2	2.0	93.2	6.8	100.0
1922-----	42.7	19.3	4.3	12.7	1.0	6.3	86.3	1.7	88.0	12.0	100.0
1923-----	43.0	14.3	8.3	9.6	1.0	8.9	85.1	2.9	88.0	12.0	100.0
1924-----	43.5	11.7	10.1	10.7	1.6	9.1	86.7	2.4	89.1	10.9	100.0
1925-----	42.5	14.0	10.8	13.2	1.0	5.0	86.5	1.0	87.5	12.5	100.0
Average-----	43.3	14.0	9.3	11.6	1.1	8.0	87.3	2.3	89.6	10.4	100.0
1926-----	48.6	11.5	10.8	11.0	.4	8.6	90.9	1.8	92.7	7.3	100.0
1927-----	46.0	10.6	12.3	12.7	1.2	8.8	91.6	1.4	93.0	7.0	100.0
1928-----	54.4	11.6	6.5	7.4	1.3	9.4	90.6	2.7	93.3	6.7	100.0
1929-----	53.9	13.5	5.6	8.9	1.2	6.5	89.6	2.5	92.1	7.9	100.0
1930-----	54.7	9.0	6.8	10.6	1.8	7.6	90.5	.5	91.0	9.0	100.0
Average-----	51.4	11.2	8.4	10.2	1.3	8.2	90.7	1.7	92.4	7.6	100.0
1931-----	61.1	11.2	5.2	6.6	.8	6.0	90.9	1.0	91.9	8.1	100.0
1932-----	64.7	13.3	2.8	6.0	2.0	4.8	93.6	.8	94.4	5.6	100.0
1933-----	51.5	13.9	5.6	4.3	3.0	7.4	85.7	2.6	88.3	11.7	100.0
1934-----	56.0	10.8	4.5	5.6	1.1	9.3	87.3	1.5	88.8	11.2	100.0
1935-----	51.1	11.0	8.4	6.9	.7	5.5	83.6	3.6	87.2	12.8	100.0
Average-----	57.3	11.8	5.3	6.1	1.4	6.4	88.3	1.7	90.0	10.0	100.0
1936-----	49.2	10.7	6.6	8.2	3.2	10.6	88.5	2.5	91.0	9.0	100.0
1937-----	55.8	14.4	-	6.5	1.9	7.4	86.0	2.4	88.4	11.6	100.0
1938-----	56.9	10.2	8.9	4.9	.9	7.5	89.3	1.4	90.7	9.3	100.0
1939-----	57.3	12.8	1.4	8.1	1.0	7.1	87.7	2.8	90.5	9.5	100.0
1940-----	57.1	19.6	2.7	4.3	3.8	4.3	91.8	1.7	93.5	6.5	100.0
Average-----	54.6	13.4	4.2	6.5	2.3	7.4	88.4	2.3	90.7	9.3	100.0

NOTE: Beginning with 1941, the cause classification in this historical series is changed as follows: (1) Fatalities in shafts and slopes have been included in "Underground workings" and are distributed according to the specified causes; prior to 1941 these deaths were grouped and shown as "Shaft and slope." (2) Fatalities from underground machinery accidents are grouped and shown separately; prior to 1941 such deaths were included in "All other underground." (3) Fatalities from roof or face falls caused by haulage equipment or machinery knocking out roof-support have been included in the respective haulage or machinery classifications; prior to 1941 such deaths were included in "Falls of roof and face." (4) Fatalities from pressure bumps and bursts and from inrush of water or material are included in "All other underground;" prior to 1941 such deaths were included in "Falls of roof and face."

Year	Underground workings								Surface 1/	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	Machinery	All other under- ground	Total		
1941-----	46.9	13.9	4.1	6.2	2.6	-	15.0	88.7	11.3	100.0
1942-----	54.4	16.8	4.0	5.8	2.7	0.4	8.8	92.9	7.1	100.0
1943-----	46.0	15.9	6.6	4.0	.9	1.4	12.4	87.2	12.8	100.0
1944-----	39.1	13.8	2.3	9.2	1.7	-	20.7	86.8	13.2	100.0
1945-----	43.3	17.5	2.8	7.7	.7	.7	17.5	90.2	9.8	100.0
Average-----	46.6	15.6	4.1	6.2	1.6	.5	14.5	89.1	10.9	100.0

See footnote at end of table.

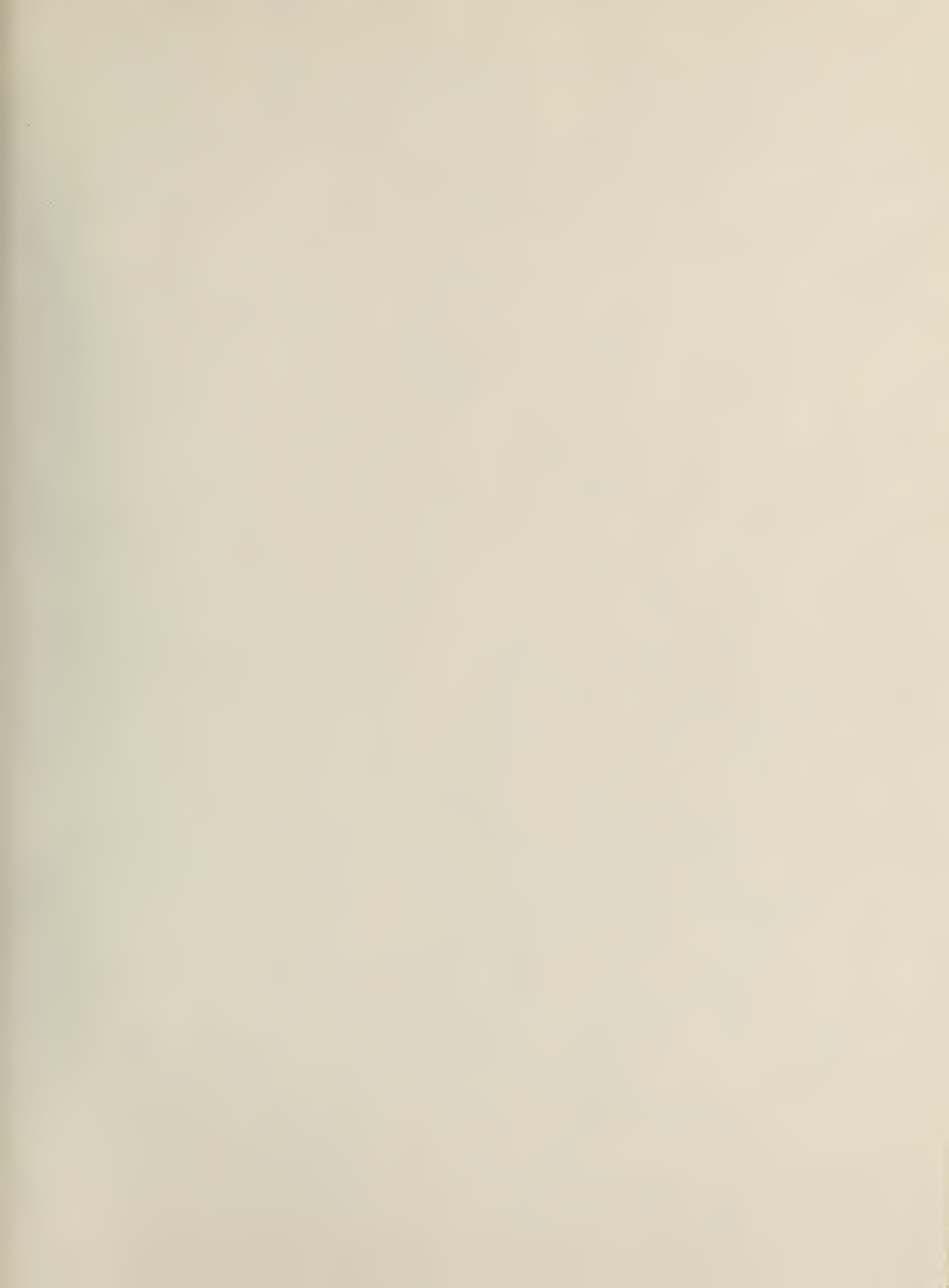
TABLE 57. - Pennsylvania anthracite mines: Percentage distribution of fatalities,
by principal cause of injury, 1906-72 - Continued

Year	Underground workings								Surface 1/	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	Machinery	All other under- ground	Total		
1946-----	53.8	13.3	1.2	4.6	1.7	0.6	12.7	87.9	12.1	100.0
1947-----	43.9	9.8	20.2	4.1	2.3	-	8.1	88.4	11.6	100.0
1948-----	57.0	10.2	1.5	5.1	.7	.7	11.7	86.9	13.1	100.0
1949-----	57.1	15.4	5.5	3.3	-	-	9.9	91.2	8.8	100.0
1950-----	55.9	7.5	5.4	5.4	1.1	-	8.6	83.9	16.1	100.0
Average-----	52.7	11.3	7.5	4.5	1.5	(2/)	10.5	88.0	12.0	100.0
1951-----	42.6	16.8	8.9	5.0	1.0	1.0	12.8	88.1	11.9	100.0
1952-----	36.3	19.2	4.1	4.1	-	2.0	20.2	85.9	14.1	100.0
1953-----	65.7	3.1	7.8	1.6	3.1	-	12.5	93.8	6.2	100.0
1954-----	58.1	12.9	1.6	-	1.6	-	8.1	82.3	17.7	100.0
1955-----	51.7	13.4	3.3	3.3	-	-	10.0	81.7	18.3	100.0
Average-----	49.3	14.3	5.2	2.6	1.3	1.3	13.0	87.0	13.0	100.0
1956-----	55.4	10.7	7.1	1.8	3.6	-	7.1	85.7	14.3	100.0
1957-----	58.8	9.8	5.9	7.8	2.0	-	11.8	96.1	3.9	100.0
1958-----	59.4	-	3.1	3.1	-	3.1	12.5	81.2	18.8	100.0
1959-----	38.3	17.0	-	4.3	-	-	27.6	87.2	12.8	100.0
1960-----	51.4	11.5	-	2.8	-	-	14.3	80.0	20.0	100.0
Average-----	52.3	11.4	4.5	4.5	(2/)	(2/)	13.7	86.4	13.6	100.0
1961-----	47.3	15.8	-	5.3	-	5.3	-	73.7	26.3	100.0
1962-----	30.8	7.6	-	-	-	-	30.8	69.2	30.8	100.0
1963-----	40.6	6.3	15.6	9.4	-	-	12.5	84.4	15.6	100.0
1964-----	37.5	20.9	12.5	12.5	-	-	8.3	91.7	8.3	100.0
1965-----	62.5	12.5	-	-	-	-	25.0	100.0	-	100.0
Average-----	40.9	13.6	9.1	4.6	-	(2/)	13.6	81.8	18.2	100.0
1966-----	83.3	-	-	-	-	-	-	83.3	16.7	100.0
1967-----	77.8	-	-	-	-	11.1	-	88.9	11.1	100.0
1968-----	25.0	-	-	-	-	-	-	25.0	75.0	100.0
1969-----	7.7	7.7	-	-	-	-	30.7	53.8	46.2	100.0
1970-----	-	-	-	20.0	-	-	-	20.0	80.0	100.0
Average-----	42.8	(2/)	(2/)	(2/)	-	(2/)	14.4	57.2	42.8	100.0
1971-----	20.0	-	-	-	-	-	-	20.0	80.0	100.0
1972-----	33.3	-	-	-	-	-	-	33.3	66.7	100.0

1/ Includes strip mines, culm banks, dredges, and mechanical-cleaning plants.

2/ Less than 0.05.

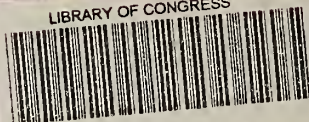
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